SCS ENGINEERS

Operations, Maintenance and Monitoring Annual Report - 2014

Report No. 36

HOD Landfill
Village of Antioch, Illinois

Prepared for:

Waste Management of Illinois, Inc.

WASTE MANAGEMENT

Closed Sites Management Group
W124 N9355 Boundary Road
Menomonee Falls, Wisconsin 53051

Prepared by:

SCS ENGINEERS
N84 W13540 Leon Road
Menomonee Falls, Wisconsin 53051
(262) 345-1220

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Offices Nationwide
www.scsengineers.com

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1.0 INTRODUCTION

This annual progress report (Report) summarizes the operation, maintenance and monitoring (OM&M) activities performed by Waste Management of Illinois, Inc. (WMII) at the HOD Landfill site (Site) in Lake County, Illinois, during the period July 1 through December 31, 2014. Those activities are related to the existing remedial components at the Site which include:

- Source control measures
  - OM&M of the landfill gas management system
  - OM&M of the landfill leachate collection system
  - Maintenance and monitoring of the landfill cap
- Landfill gas, leachate, groundwater, and surface water sampling and analysis

The OM&M activities performed during the first semiannual 2014 period (January 1 to June 30, 2014) at the Site were transmitted in a document entitled "Operations, Maintenance and Monitoring Progress Report No. 35," dated March 2015 prepared by SCS Engineers (SCS). Three copies of that document were transmitted by WMII to Ms. Karen Mason-Smith at the U.S. Environmental Protection Agency (USEPA) by a cover letter from WMII dated March 13, 2015. An additional copy was also transmitted by that cover letter to Ms. Robin Ambrose at the Illinois Environmental Protection Agency (IEPA).

Semiannual and annual progress reports are currently prepared and submitted in accordance with the requirements of Subsection 7.1 of the Performance Standards Verification Plan (PSVP) for the Site. Thus, this report is the 36th periodic OM&M submittal for the Site. This annual report was prepared by SCS in accordance with the requirements of the PSVP (RMT, 2001). In addition to transmitting the data obtained during the second semiannual period (July – December 2014) at the Site, this report also includes an evaluation of leachate, groundwater, and surface water data from the entire period (i.e., 2014). The evaluation includes a comparison of that data to established criteria for the Site (i.e., site-wide protection standards) and to historical data where warranted.

Data from analysis of leachate, groundwater, and surface water samples collected semiannually at the Site is also screened using the established site-wide protection standards identified in the PSVP. These "interim screening" reports are also prepared by SCS and transmitted to USEPA. These reports, typically referred to as exceedance reports, were dated June 20, 2014 and January 6, 2015, for this reporting period (i.e., 2014).

USEPA personnel visited the site on October 30, 2014, to kick off the 5-year review that is scheduled to be completed in 2015.

1.1 PROJECT BACKGROUND

1.1.1 Site History

The HOD Landfill is located in the Village of Antioch, in Lake County, Illinois. The landfill area is approximately 51 acres within a total property area of 81 acres. Within the waste mass, there are two separate landfill areas. The "old landfill" consists of approximately 24 acres and is located on the western third of the property. The "new landfill," which consists of approximately 27 acres, is located directly east of, and is contiguous with, the "old landfill."

Permitted waste disposal activities began at the Site in 1963 and continued until approximately 1984. In 1989, the landfill site was closed and a continuous soil cap constructed over both filled areas. On August 20, 1990, the USEPA entered into Administrative Order on Consent with WMII for performance of a Remedial Investigation/Feasibility Study (RI/FS) at the Site. The RI activities began in 1990 and were subsequently completed in 1994. USEPA issued the Record of Decision (ROD) for the Site on September 28, 1998. The selected remedy for the Site included landfill cap improvements, enhanced gas collection and treatment, enhanced leachate collection, leachate treatment, monitored natural attenuation of groundwater, and institutional controls.

1.1.2 Remedial Design and Remedial Action Construction

On April 14, 1999, the USEPA issued a Unilateral Administrative Order (UAO) that directed WMII, as one of the HOD site respondents, to develop and implement a remedial design and remedial action (RD/RA) plan to implement the remedy identified in the ROD. The RD/RA construction activities began at the Site on August 21, 2000, and were substantially complete by October 2, 2001. The RA construction activities included site grading and waste relocation, modifications to the final cover system, installation of a dual leachate/landfill gas extraction and collection system, construction of a leachate loadout facility, and site restoration activities.

Initial startup and maintenance of the landfill gas and leachate management systems began on April 3, 2001, and continued through April 2002. A summary report of these activities was submitted to the USEPA on April 10, 2002. Subsequent OM&M of the systems has been documented in the semiannual and annual reports that have been submitted to the USEPA.

1.1.3 Landfill Gas-to-Energy System

The landfill gas management system at the Site was modified in 2003 to include a pipeline and an off-site landfill gas-to-energy system to beneficially use landfill gas collected at the HOD Landfill. The gas-to-energy system is currently owned and operated by Community High School District No. 117 (District No. 117). System startup and balancing activities occurred during the third and fourth quarters of 2003. A Landfill Gas System Modification Report, which includes information regarding modifications to the landfill gas management system and appurtenances to accommodate the landfill gas-to-energy system, was included in Operations, Maintenance and Monitoring Progress Report No. 9 (first quarter of 2004) dated July 2004 (RMT, 2004).

The gas-to-energy system was operated independently from the gas management system at the Site. In June of 2013, District No. 117 decided to take the gas-to-energy system offline. The

costs associated with additional system upgrades needed to keep the system operating efficiently reportedly outweighed the benefits of using the gas collected at the Site. The gas-to-energy system was decommissioned in 2014. Landfill gas will continue to be collected and exclusively burned in the pedestal flare at the Site.

1.1.4 Final End Use Plan

In 2003, the USEPA issued a Ready for Reuse Determination for the HOD Landfill. This led to a final end use plan that included development of a portion of the Site to support a variety of recreational activities. The recreational area includes a playground, soccer and baseball fields, tennis courts, and additional recreational field and facilities for District No. 117 Athletics.

From 2004 to 2007, portions of the landfill received additional soil and grading to support the development and implementation of the final end use plan. During this period, tennis courts, softball and soccer practice fields, a paved parking area, and an access road were installed. A competition field hockey field, an open space directly east of the field hockey field, and portions of the western and northern slopes were graded and seeded. A concession stand building and a water pump house building (pump house) were constructed on the western portion of the Site. Access roads and walking paths, a site water supply pipe, surface water drainage piping and other surface water drainage features (including catch basins, manholes, and culverts), irrigation, piping, and electrical conduit and transformers were also installed in association with that development.

The Site is currently utilized by the public in accordance with the plan, thus maintenance or monitoring of site access controls (i.e., perimeter fencing or signage) is not required. Groundwater use in the vicinity of the site is prohibited by the Village of Antioch ordinances (Antioch Water Works and Sewage Ordinance Sections 50.008, 52.009, and 52.011) requiring properties within the Village limits that abut the public water works and sewerage system to connect to the municipal water supply system. Furthermore, an ordinance prohibits the installation of private wells within Village limits.

1.2 PURPOSE AND SCOPE

OM&M and performance monitoring of the source control remedial components is part of the RA for the Site. The requirements associated with maintenance of the landfill cap and operation and monitoring of the leachate/landfill gas collection system are identified in the Final O&M Plan (RMT, 2001) and the PSVP. The data associated with these activities is generally documented in periodic inspection and maintenance reports.

The PSVP also includes the Quality Assurance Project Plan (QAPP) (RMT, 2001) and the Field Sampling and Analysis Plan (RMT, 2001) to support sample collection and analysis in association with performance monitoring at the Site. The current environmental (groundwater, surface water, landfill gas, and leachate) monitoring program, approved by the USEPA in a May 17, 2007 correspondence, is summarized in **Table 1**. As described therein, implementation of the environmental monitoring program generates data from analysis of samples collected from the identified media at different frequencies throughout the year. A preliminary analysis of the

data, with regard to exceedances of established screening criteria from each semiannual monitoring period is submitted to the USEPA prior to submittal of the annual report. The preliminary data analysis (i.e., Exceedance Report) for the first 2014 semiannual reporting period was dated June 20, 2014. The exceedance report for the second 2014 semiannual reporting period was dated January 6, 2015.

This Report is presented to transmit the OM&M data generated during the second semiannual period in 2014 (July – December 2014), which is the 36th reporting period following completion of the interim operation period.

The scope of this report includes the following:

- Identification of Site inspection and maintenance activities performed during the second 2014 semiannual reporting period (July – December 2014)
- Transmittal of environmental monitoring data generated during the second semiannual 2014 semiannual reporting period (July – December 2014)
- Evaluation of data quality from the second 2014 semiannual reporting period (July - December 2014)
- Analysis of the environmental data generated in 2014 (i.e., first and second semiannual periods)
- Future site activities related to OM&M

The analysis of the 2014 data includes an evaluation of groundwater, surface water, and leachate results from 2014 that exceed the site-wide protection standards. Groundwater results from this period that exceed the identified standards are also compared with historical data, where warranted, to further evaluate the significance of these results. Also included is an assessment of the groundwater results with regard to the effectiveness of natural attenuation of the contaminants of concern (COCs) at the Site.

2.0 SITE INSPECTION AND MAINTENANCE ACTIVITIES

Monthly site inspections were performed during the second semiannual 2014 reporting period by WMII personnel on July 7, August 5, September 3, October 7, November 7, and December 20, 2014. The site inspections include an evaluation of the condition of the final cover system, groundwater wells, gas probes, extraction wells, condensate sumps, extraction system piping, blower facility, flare, fencing and signs, and access road. Observations are noted directly on the Facility Inspection Report form. The form allows the evaluator to note whether each component of the Site is "adequate" or "requires maintenance." If an item is marked as "requires maintenance," the item is evaluated and appropriate resources are scheduled in conjunction with ongoing scheduled (i.e., routine) maintenance activities or as a non-routine maintenance item to address the issue.

The monthly Facility Inspection Reports completed during this reporting period are included in **Appendix A**. A summary of maintenance items performed during this reporting period (i.e., 2014) is provided in **Table 2.**

While the monthly records identify a variety of issues that are typical of operation of these types of systems, it appears that the issues were dealt with in a timely manner such that they did not materially impact the overall operation of the systems. In addition to responding to any identified maintenance issues, routine (i.e., scheduled) maintenance is performed to support continuing operation of the systems. Routine maintenance items include periodically changing fluids associated with the compressor, lubrication of the blower, etc.

As indicated in **Table 2**, the majority of the maintenance issues identified during this reporting period were minor with the exception of a leachate force main blockage that was initially identified during the 2013 reporting period. The leachate force main at the site was designed as a looped system, installed at the perimeter of the landfill, to transfer the leachate from the pumps in the wells to the underground storage tank near the blower/flare building at the Site.

A number of attempts to resolve the force main issues and blockages were made in 2014. Compressed air was introduced into several sections of the force main on April 24 and May 22, 2014, in an attempt to isolate any obstructions in the buried pipe. High pressure water was introduced into several sections of the force main on the north and south sides of the hill during the period of July 8 through July 14, 2014, in an attempt to "jet" out any blockage in the pipe. Finally, the soil atop the force main between wells GW28 and GW29 was removed during the period of July 15 and 16, 2014, and the pipe section replaced.

In April 2014, WMII authorized a contractor (i.e., Milwaukee Instruments) to replace the programmable logic controller (PLC) at the site. That PLC controls the flare, building, and leachate monitoring systems at the site. The contractor also installed a new human machine interface (HMI) so that the PLC functions could be monitored remotely and on site.

3.0 ENVIRONMENTAL MONITORING

3.1 GENERAL INFORMATION

Landfill gas, leachate, groundwater, and surface water quality were monitored during the second semiannual 2014 reporting period at the HOD Landfill in accordance with the current environmental monitoring program that was approved by the USEPA in a correspondence dated May 17, 2007. That plan is summarized in **Table 1**.

The current environmental monitoring program was originally proposed in a submittal dated September 5, 2006. Review comments regarding the submittal were issued by the USEPA on October 12, 2006. WMII prepared a follow-up response to the review comments, which was submitted to the USEPA on February 21, 2007.

The results include both field and laboratory data to assess the performance of the remedial actions at the Site. In general, the results from the environmental monitoring program continue to indicate that the remedial actions are functioning as designed. The environmental monitoring activities conducted at the Site are described in the following subsections.

3.2 LANDFILL GAS SYSTEM MONITORING

3.2.1 Third and Fourth Quarter Landfill Gas System Monitoring

During the second 2014 semiannual period, landfill gas quality at the blower/flare station was monitored on a monthly basis. The performance of the landfill gas extraction system is assessed by monitoring gas quality at the extraction wellheads on a quarterly basis. Monitoring at the gas extraction wellheads was performed during the second semiannual 2014 period on September 22 and December 20, 2014. Another component of assessing system performance at the HOD Landfill includes sampling of six perimeter landfill gas probes and three ambient air sampling points, located on the east side of the property. The approved sampling program indicates that the perimeter gas probes and ambient air locations are required to be sampled on an annual basis. During the 2014 reporting period, the gas probes were sampled four times (March 26, June 25, September 22, and December 20, 2014) and ambient air sampling was performed twice (June 25 and December 20, 2014).

Landfill gas quality was measured using field instrumentation (i.e., Landtec GEM 2000 or GEM 5000) to identify concentrations (percent by volume) of methane (CH_4), carbon dioxide (CO_2), oxygen (O_2), and nitrogen (i.e., balance gas) at the blower/flare, 33 dual leachate/gas extraction wells, 2 manholes, 6 landfill gas monitoring probes, and the 3 ambient air monitoring locations. Balance gas, interpreted as nitrogen, was calculated as the net remaining volume fraction after the other measured constituents (CH_4, CO_2, and O_2) were accounted for. Pressure data was also collected using monitoring equipment at the blower/flare, manholes, gas probes, and gas wells. The monitoring locations are shown on **Figure 1**.

The quarterly landfill gas/leachate monitoring forms completed during this period are included in **Appendix B**. Data from monthly sampling at the blower/flare is presented in **Table 3**. The data is reviewed and utilized as a basis for adjustments to the valves on the gas extraction points, if necessary, to balance the system. The goal of a "balanced system" is to maximize gas flow and maintain acceptable landfill gas quality. The gas flow at a well is determined by the ability of a particular well to produce gas and the vacuum applied to that well. The requirements for gas quality can vary depending on if the gas is used as a fuel (i.e., in a microturbine) or if it is flared. Use as a fuel is typically associated with higher methane concentrations (> 35 percent by volume) and lower oxygen levels (< 5 percent by volume). Gas quality is more critical when used as a fuel and less of a concern when flared. Gas well tuning must account for requirements regarding gas quality and also the need to reduce the potential for gas migration from the landfill.

3.2.2 Evaluation of Landfill Gas System Monitoring Data

The landfill gas management system at the Site was modified in 2003 to include the landfill gas-to-energy system that was constructed to beneficially use landfill gas. In 2006 and 2007, a pedestal flare was installed adjacent to the enclosed flare that was originally constructed at the Site to combust the lower volume of gas that is available when the gas-to-energy system is operating. That gas-to-energy system was reportedly taken off-line in June 2013 and decommissioned in 2014.

During this reporting period, landfill gas continued to be withdrawn from the wells by vacuum created by the operation of a blower. The blower output (i.e., exhaust) is directed to the pedestal flare where an electronic spark ignites the gas as needed, so it is burned in the atmosphere.

The monthly and quarterly field data regarding landfill gas quality and quantity is routinely reviewed. Adjustments are made to the extraction points to maximize landfill gas volume and quality, while maintaining oxygen concentrations at an acceptable level. Review of the data from this reporting period indicates that landfill gas flow at the flare ranges from approximately 68 to 123 cubic feet per minute (cfm).

Vacuum at the individual wells varies over time. There were 12 wells where no vacuum was present during the March sampling event. The number of wells without vacuum decreased at the time of the June event - to a total of 7 wells, then again to only 4 wells at the time of the September sampling event, and finally all wells were under vacuum at the time of sampling in December. Vacuum at the extraction wells can be affected by maintenance issues, distance from the blower, tuning of the gas well field (i.e., increasing vacuum at wells locations that have higher methane concentrations), and watered out or blocked headers.

Methane concentrations at the gas wells where measurements were taken during this reporting period ranged from 0.0 to 81.8 percent by volume. Oxygen concentrations at these wells ranged from 0.0 to 20.9 percent by volume. Oxygen concentrations were greater than or equal to 5 percent by volume at 14 of the 34 extraction points in September, and 16 of the 35 points where measurements were taken in December 2014.

Differential pressure measurements across the orifice plates (where present) indicate that landfill gas flow from the individual wells is low, generally less than 10 cfm. There are no apparent significant variations in gas flow between the wells. This data is consistent with the temperature readings, in that there are no areas of the landfill where the temperature is elevated, indicating potentially higher gas production.

With regard to the perimeter probes, methane was not identified at any of the gas probes (GP3A, GP4A, GP5A, GP6, GP7, and GP8) during the quarterly monitoring events that were performed in January, June, September, and December 2014. In the case that methane would be detected at a perimeter probe, the landfill gas technician would evaluate the operation of gas extraction system and make adjustments to increase the vacuum in nearby wells to reduce the methane concentration observed in perimeter probes.

Monitoring of the ambient air points (AA1, AA2, and AA3) was performed during June and December 2014. No methane was identified at any of ambient air locations during this reporting period.

The data generally indicates that the landfill gas collection system was operated effectively and in accordance with the design during this reporting period. The operation of the landfill gas collection system is expected to continue in 2015. Specific recommendations for operational improvements are included in **Section 6.0** of this Report.

3.3 LEACHATE COLLECTION SYSTEM MONITORING

The majority of the leachate extraction points were designed and installed as dual extraction wells in that landfill gas and leachate are collected at each of 33 vertical wells installed in the waste mass. Leachate is pumped from the wells using pneumatic pumps. The pumps were originally set at an elevation within the well to achieve an inward gradient. The pumps are approximately 4 feet in length and float actuated, in that the pump rate and associated flow is determined by the amount of liquid above the top of the pump. Leachate is also pumped from two manholes, MHE and MHW, that are connected to horizontal collection pipes located on either side of the clay cutoff wall that divides the east and west areas of the landfill.

Leachate pumped from the collection manholes and extraction wells flows through a 2-inch perimeter force main into a 30,000-gallon underground storage tank that is located in the southwest corner of the landfill. The leachate from the storage tank is pumped into tank trucks when necessary and transported by PATS Service, Inc. (PATS) of New Munster, Wisconsin, to the City of Burlington, Wisconsin Wastewater Treatment Plant. The tank level is monitored by a transducer integrated with a programmable logic controller (PLC) at the Site. The PLC provides notice through a supervisory control and data acquisition (SCADA) system when the tank level is such that pumping is necessary.

3.3.1 Second Semiannual Leachate Collection System Monitoring

The volume of leachate transported by PATS from the HOD Landfill for off-site treatment and disposal at the City of Burlington, Wisconsin Wastewater Treatment Plant during this reporting period (second semiannual 2014) is approximately 243,500 gallons, or an average of approximately 1,323 gallons/day. The volume is based on the quantities identified on the individual load tickets. During the first semi-annual reporting period, a total of approximately 192,000 gallons of leachate were removed (1,067 gallons/day). A summary of the leachate volumes provided by PATS is included as **Appendix C**. Historically, higher volumes of leachate (1,300,000 – 2,200,000 gallons) were removed since operation began in 2001.

Leachate volumes from individual extraction points can be estimated from the pump cycle counter readings that are taken on a quarterly basis. As previously determined during the interim O&M period, one cycle of each pump was approximately equal to 0.115 gallon (0.435 liter/cycle) (RMT, 2002). This rate is somewhat variable because of the changing conditions and the aging of the individual pumps and wells. Volume calculated from the pump cycle numbers will not correlate exactly with the volume of leachate hauled off site, but may give an indication if the pump is not operating, or the relative volumes of liquid being removed from various areas of the landfill. The locations of the dual gas/leachate extraction wells are shown on **Figure 1**.

Design calculations and projections prepared by RMT in the Predesign Investigation and Remedial Design/Remedial Action Workplan (RMT, 1999) predicted initial leachate extraction volumes (2001) would range between 4,000 to 6,000 gallons per day from the site and slowly decrease over time as pumping continued. Thus, to remove 5,000 total gallons per day, each of the 35 leachate pumps would have to remove, on average, 143 gallons per day (1242 cycles) or 322,920 cycles in a 260 day period. Only six of the leachate pumps met or exceeded this value based on the cycle counter readings from this annual reporting period (2014). Based on the cycle

counter readings recorded by the leachate pumps, a total of 561,625 gallons of leachate were removed from the site during the period of March 31 to December 20, 2014; an average of 2,152 gallons per day. The recorded cycles at each leachate pump is provided in **Table 4**. Based on the data from the cycle counters, flow from the individual wells during this period ranges to a maximum of approximately 500 gallons/day (LP4). The technician also noted that the pump in LP4 is relatively new and no operational issues were identified, thus the cycle counter reading at LP4 may be accurate. The highest number of cycles (>800,000) during the approximate nine month period in 2014 were observed at wells GW22, GW29, LP1R and LP4.

The cycle counter readings indicate that the pumps in 21 of the 35 wells cycled less than 100 times during the period of March 31 through December 20, 2014. While the pumps in the wells with the highest number of cycles (GW22, GW29, LP1R, and LP4) likely accounted for the majority of the leachate extracted, the wide variation in pump cycle counter readings may indicate that these readings are not always accurate. Thus, while the cycle counter readings can provide an idea as to the relative leachate discharge from each well, they may not be an accurate record of the volume of leachate that is removed from the site. The volume of leachate transported by PATS is likely the most accurate estimate of the volume of leachate removed from the site. The leachate hauling records from PATS during this reporting period (2014) are summarized in **Appendix C**.

The pneumatic pumps installed in the wells are float actuated in that they only operate when liquid levels are present above the top of the pump. The pumps are approximately 4 feet in length and were initially installed to an elevation projected to achieve inward gradients at the Site. Since the wells were not installed specifically to achieve the target leachate level, there are some cases where the target elevation cannot be achieved. The leachate pumps are maintained on both an as-needed and periodic basis. As-needed maintenance is performed when the periodic data indicates the pump may not be functioning (i.e., no change in cycle counter reading). In addition to as-needed maintenance, routine pump maintenance is performed periodically.

Review of site maintenance records, summarized in **Table 2**; indicate that repairs were performed on several pumps in 2014. Those repairs included: replacing the flex hose at GW28 on January 9, 2014, replacing the air pressure regulator on LP4 on August 5, 2014, and cleaning the air pressure regulator on August 5, 2014, at GW16.

Review of the quarterly leachate level measurements from before and after those maintenance events indicates that the levels within the wells did not significantly decrease over time at those wells. The blockage associated with the leachate force main may have affected leachate elevations observed at wells on the eastern portion of the property during this reporting period and suggests that the reported leachate levels for those wells may not be representative of the actual leachate elevations in the waste under normal operating conditions.

Review of data from prior measurements indicates that the identified leachate levels are likely a result of pump performance, or other factors, and may not be representative of actual leachate elevations in the waste.

Individual well productivity and drawdown responses are likely to vary widely from well to well because of the heterogeneous nature of the landfill, including the heterogeneity of refuse (i.e., waste type, compaction, degree of decomposition, gas content, and temperature), the presence of daily and intermediate covers, the effect of landfill gas pressure buildup, and landfill geometry (i.e., buried berms, ridges, and trench disposal geometry). There are other factors that could also affect liquid level measurements at individual wells related to well construction (i.e., surface seal integrity) or location (i.e., vaults and site irrigation).

Quarterly liquid level measurements were taken at the individual extraction well locations during the second semiannual reporting period on September 24 and December 20, 2014. The liquid levels were measured after the leachate pumping system was shut down for a minimum of 48 hours. A summary of the leachate levels recorded during this reporting period is provided in **Tables 5** and **6,** respectively.

A sample was collected from the leachate holding tank on October 21, 2014, for analysis of the parameters on the semiannual parameter list. The results from laboratory analysis of that sample are included in **Appendix D** and in the electronic data deliverable (EDD) in **Appendix E**.

Leachate extraction from the wells and quarterly monitoring of leachate levels will continue in 2015. Recommendations with regard to the leachate extraction program are included in **Section 6.0** of this Report.

3.3.2 Evaluation of Leachate Collection System Data

Although there is no established criteria with regard to leachate volume collected, the leachate heads at the individual wells are assessed in accordance with the criteria established in the April 14, 1999 USEPA Statement of Work associated with the UAO for the HOD Landfill, in that the active leachate extraction system was to be designed to create an inward hydraulic gradient to control and collect groundwater in the surficial sand and gravel aquifer in the vicinity of the Site within 12 years from the start of the system operation.

The basis for assessing the creation of inward gradients is a comparison of shallow groundwater level measurements from five southern water table monitoring wells (W05S, W06S, PZ3U, PZ04U, and PZ05U) against measurements of non-pumping head values in 15 of the 33 extraction wells (GWF5, GW20, GW21, GW22, GW23, GW24, GW25R, GW26, GW27, GW28, GW29, GW30, LP1R, LP3, and LP10). The 15 extraction wells are located on the west, south, and east perimeter of the waste at the site. Non-pumping head values are defined as measurement of leachate head levels after the pumps have been turned off for a period of time ranging from two to seven days.

An elevation of 761 feet above mean sea level (amsl) was set as the basis for design of the leachate extraction points, with regard to a target head maintenance level (RMT, 2001e).

Leachate quality is evaluated by screening the data using the wastewater effluent standards for leachate as identified in Table 4 of the PSVP.

3.3.2.1 Leachate Head Elevation

Tables 5 and **6** include a comparison of the leachate head level measurements taken during this reporting period to the target leachate level (761 feet amsl). The data from this reporting period shows that the target level was achieved at only 2 (GW16 and GW17) of the 35 extraction points. An isocontour map showing the difference in leachate elevation to the target elevation (761 amsl) in December 2014 is presented as **Figure 2**. The isocontour plot in **Figure 2** highlights the variability in leachate levels across the site. For example, differences of over 25 vertical feet in leachate level occur over 200 horizontal feet in some areas.

The long-term performance of the leachate extraction pumps, as compared to the initial elevations when the pumps were installed (January 2001), is presented in **Table 7**. This evaluation indicates that although the leachate elevations in December 2014 are lower than the initial levels at 15 of the 35 monitoring locations, the levels are still higher at 20 points. Of the 15 perimeter extraction wells used to evaluate the leachate elevation with regard to inward gradients, the liquid level in December 2014 was lower than the initial level (January 2001) at 8 of those points. An increase in leachate elevation from September to December 2014 was observed at 15 of the 32 wells where measurements were taken. The increases ranged from 0.1 (at several wells) to 11.2 feet (GW18). Decreases in leachate elevation from September to December were noted in 15 wells and ranged from 0.1 (at several wells) to 2.9 feet (GW26). The leachate elevation ranged from 6.1 to 15.1 feet above the target elevation (761 amsl) at the 4 wells (i.e., GW22, GW29, LP1R, and LP4) where the cycle counters indicated the highest number of cycles during 2014.

3.3.2.2 Leachate Transportation and Off-site Disposal

As shown in the table in **Appendix C**, a total of 435,500 gallons, or an average of 1,193 gallons per day, of leachate were removed from the Site during the 2014 reporting period. The leachate is pumped from a holding tank by PATS and transported to the City of Burlington, Wisconsin Waste Water Treatment Plant for disposal. This reported amount of leachate removed is likely more accurate of the actual leachate removal from the site compared to that which is estimated from the cycle readings recorded at specific leachate pumps.

As shown on the graph in **Appendix C**, the volume of leachate removed from the landfill remained relatively stable from 2009 to 2012; 2009 (3,900 gallons/day), 2010 (3,500 gallons/day), 2011 (3,970 gallons/day), and 2012 (3,504 gallons/day). The volume of leachate removed in 2013 and 2014 was lower than prior years. The leachate volume removed averaged 1,549 gallons/day and 1,193 gallons/day in 2013 and 2014, respectively. The relatively lower volumes of leachate removed in 2013 and 2014 are likely the result of the header blockages described herein. The leachate volumes did not significantly increase after a section of the force main was replaced in July 2014. Approximately 20,000,000 gallons of leachate have been removed from the landfill since 2001.

3.3.2.3 Leachate Quality

During this reporting period, a leachate sample was collected from the holding tank on October 21, 2014. The sample was analyzed for the parameters identified in the current environmental monitoring program that was approved by the USEPA in a May 17, 2007 correspondence. The analytical results from both semiannual samples collected during 2014 are evaluated with regard to the site wide protection standards (Table 4 of the PSVP) for leachate as identified in **Table 8**.

As shown in **Table 8**, there were several compounds identified in the leachate that exceeded the identified standards, thus the leachate will continue to require off-site disposal. Consistent with results from analysis of prior leachate samples, chlorinated ethenes (trichloroethylene, tetrachloroethylene, cis or trans-1,2 dichloroethylene, or vinyl chloride) were not identified at concentrations above reporting limits in analysis of the leachate samples collected in 2014. No modifications to the current leachate sampling and management program are expected in 2015.

3.4 GROUNDWATER MONITORING

Groundwater sampling and analysis was performed in accordance with the environmental (groundwater, surface water, landfill gas, and leachate) monitoring program that was approved by the USEPA in a May 17, 2007 correspondence. The approved current groundwater sampling program is summarized in **Table 1**.

This Report presents an evaluation of the data from this reporting period (i.e., second semiannual 2014). In addition, the groundwater monitoring data from both sampling events in 2014 is evaluated with regard to established site-wide groundwater protection criteria, flow, and the effectiveness of natural attenuation for the COC at the Site. The evaluation focuses on the two groundwater zones monitored at the HOD Landfill: the shallow, unconfined sand and gravel aquifer that is present only near the southern and western edges of the landfill; and the confined, deep sand and gravel aquifer (DSGA) that underlies the entire site.

Groundwater elevations in the clay-rich diamicton that separates the two aquifers are measured and recorded to assess any changes in vertical gradients between the two units. A detailed description of groundwater occurrence and flow at the HOD Landfill is provided in the predesign investigation (RMT, 2000).

3.4.1 Groundwater Level Measurements

3.4.1.1 Second Semiannual Monitoring 2014

Water levels were measured by personnel from Environmental Monitoring and Technologies, Inc. (EMT), of Morton Grove, Illinois. Groundwater elevations were calculated at 30 monitoring wells at the Site from measurements taken on April 17 and October 21, 2014. The monitoring well locations are shown on **Figure 1**, and groundwater elevations are summarized in **Table 9** (April 2014) and **Table 10** (October 2014).

3.4.1.2 Annual Evaluation

The annual evaluation of groundwater elevations includes analysis and comparison of the data from the two monitoring events during this reporting period (2014) with historical data and interpretations to determine if the data from this reporting period is inconsistent with prior information. Inconsistent data may indicate that conditions have changed, such that a more detailed analysis of groundwater flow may be warranted.

3.4.1.3 Water Table Wells

During the 2014 semiannual sampling events, depth to water measurements were recorded at 16 monitoring wells screened in the shallow sand and gravel unit. Groundwater elevations at these wells (i.e., water table wells) were consistent with historical data collected during previous sampling events. Review of groundwater elevations at wells located in the shallow unconfined sand and gravel zone indicates that horizontal gradients are very small across the site.

3.4.1.4 Deep Sand and Gravel Aquifer

Potentiometric surface maps showing groundwater elevations and flow direction in the DSGA during the semiannual monitoring events in April 2014 and October 2014 are provided as **Figures 3** and **4**, respectively. The identified horizontal gradients (i.e., flow direction) in April 2014 are consistent with prior interpretations that indicate a relatively flat hydraulic gradient (i.e., slow groundwater flow velocity). The October 2014 groundwater elevations also show a relatively flat hydraulic gradient, but also an apparent inward gradient to the Site.

As reported in the Predesign Investigation (PDI) Groundwater Report (RMT, 2000), the potentiometric surface in the DSGA was found to be strongly influenced by the confined conditions in the DSGA and the effects of the variable schedule of pumping from the Village of Antioch municipal wells (VW3 and VW5) to the west and the south of the landfill. The Village of Antioch reportedly brought three new pumping wells on line in 2008, such that wells VW3 and VW5 are not routinely utilized. The new wells are located 2 to 3 miles east of the Village, according to Mr. Dave Hanson of the Village of Antioch Public Works (January 7, 2009). Pumping from these wells does not appear to influence flow in the vicinity of the landfill.

Groundwater elevation data from this reporting period is generally consistent with prior data at the site. Potentiometric flow maps, **Figures 3** and **4,** developed from groundwater elevations collected during groundwater sampling events indicate a southeast to east flow in April 2014. The October 2014 elevation data suggests a flow towards the center of the Site. The flow directions illustrated in this annual report support the existing definition of conditions.

Groundwater elevations in the DSGA have been shown to respond to pumping, but it is possible that other hydraulic factors (such as changes in aquifer thickness and/or changes in aquifer transmissivity) influence (or compound) the effects of pumping on the groundwater elevations, as well. Thus, while pumping may influence the groundwater flow directions in the DSGA, a direct correlation between flow direction and specific pumping schedules is not observed because of the complex hydrology of the aquifer.

The data from this reporting period (2014) is consistent with the current interpretation of groundwater flow in the vicinity of the Site. The current monitoring well locations are sufficient to identify and monitor potential changes to the direction of groundwater flow in and around the HOD Landfill.

3.4.2 Groundwater Sampling

3.4.2.1 Second Semiannual Event 2014

The second semiannual groundwater sampling event in 2014 was performed by EMT. Laboratory analysis of samples was performed by TestAmerica, Inc. (TA) of Amherst, New York. The samples were analyzed for the parameters identified in the approved groundwater monitoring program.

Fifteen groundwater monitoring wells, two surface water locations, and a Village of Antioch water supply well (i.e., VW3) were sampled during the period October 21 through 23, 2014. The results from analysis of samples collected during this period are included in **Appendix F**. An electronic file (i.e., EDD) of the results from the second semiannual period in 2014 is included on a compact disc in **Appendix E.**

3.4.2.2 Annual Groundwater Data Evaluation

Groundwater analytical results and exceedance reports from the first semiannual monitoring event in 2014 were provided in the first semiannual monitoring report prepared by SCS (March 2015). The data from the second semiannual 2014 reporting period was screened with regard to the site-wide protection standards established for the Site; the results of that screening were transmitted to USEPA in a document dated January 6, 2015. This Report includes an evaluation of the groundwater analytical results from both 2014 semiannual monitoring events and a comparison of 2014 results to historical data for the HOD site, where warranted. Data quality is evaluated by review of the laboratory analytical reports from this reporting period (second semiannual 2014). Data reproducibility is assessed by comparison of results from the three duplicate samples (SW01, US-01D, and G-102) collected from one surface water and two groundwater monitoring well locations during this period. Finally, an interpretation of specific analytical results from 2014 in the DSGA is provided in **Subsection 3.4.3** in support of the annual evaluation of the selected remedy for groundwater at this site, monitored natural attenuation (MNA).

Exceedance of a site-wide groundwater protection standard, as defined in the PSVP (RMT, 2001e), was reported in data from analysis of samples collected from 6 of the 15 groundwater points sampled in 2014. Four of the wells are located in the upper sand and gravel (G102, PZ04U, US04S, and W06S), and two are located in the DSGA (US03D and W08D). The locations of these wells are shown on **Figure 1**. A summary of the groundwater exceedances observed during 2014 is provided in **Table 11**.

3.4.2.3 Exceedances of Site-Wide Groundwater Protection Standards - Inorganic Parameters

As shown in **Table 11**, the results from analysis of samples collected in 2014 from six groundwater monitoring wells exceeded the site-wide groundwater protection standards for inorganic compounds including manganese, iron, sulfate, total dissolved solids (TDS), or chloride. The results from analysis of samples from four wells (G102, US03D, US04S, W06S) exceeded the site-wide groundwater protection standard for dissolved chloride (i.e., 200 milligrams per liter [mg/L]). The results from three wells (PZ04U, W06S, and W08D) exceeded the site-wide groundwater protection standard for manganese (i.e., 150 micrograms per liter [µg/L]). The results from one well (W06S) exceeded the site-wide groundwater protection standard for TDS (i.e., 1,200 mg/L). A single result from one well (G102) exceeded the site-wide groundwater protection standard for iron (i.e., 5,000 µg/L). There was only one location (W06S) where the data exceeded the screening criteria for sulfate (i.e., 400 mg/L). With regard to inorganic parameters, the greatest number of exceedances (four) is identified in the analysis of the samples collected from well W06S. The inorganic results are consistently above the screening criteria in both sampling events in 2014 and with historical data from analysis of prior samples collected from these wells.

The dissolved manganese concentrations at wells PZ04U, W06S, and W08D may be an indicator of reducing conditions in groundwater at these well locations. Elevated concentrations of these compounds are commonly found in groundwater where significant dissolved organic carbon is present. As available oxygen is consumed by the oxidation of organic carbon, reducing conditions develop and the solubility of iron and manganese increases. In addition, under these conditions, manganese and iron minerals and coatings on sand grains are used as terminal electron receptors by bacteria, resulting in the production of dissolved iron and manganese in groundwater.

The dissolved sulfate concentrations identified from laboratory analysis of the two samples from well W06S in 2014 were similar to concentrations reported from analysis of prior samples from this well. The persistence of sulfate in analysis of samples from well W06S indicates that the geochemical conditions at W06S have not become methanogenic. The modest variability of both manganese and sulfate concentrations at W06S from year to year most likely reflects the natural variability in the shallow groundwater system.

The four wells (G102, US03D, US04S, and W06S) where chloride was identified at concentrations that exceeded the site-wide groundwater protection standard are all located in the southwestern area if the site. Three of these wells (G102, US04S, and W06S) are shallow wells located in close proximity to the limits of waste. The well depths of G102, US04S, and W06S are 25 feet, 23 feet, and 17 feet below ground surface, respectively. Well US03D is the only monitoring well screened in the DSGA, where the chloride concentration exceeded the site-wide groundwater protection standard. It should be noted that paved public roadways are present in this area. Salt is applied seasonally to these roadways to control ice. Shallow groundwater and surface water is also present in this area.

In summary, the concentrations of inorganic compounds that exceeded established site-wide groundwater protection standards at the HOD site are generally consistent with previous results.

While there is typically some variability from monitoring event to monitoring event, and from year to year, the general pattern of inorganic parameters appears to be well established and stable.

3.4.2.4 Exceedances of Site-wide Groundwater Protection Standards – Organic Parameters

As shown in **Table 11**, results from analysis of samples collected from well US03D in 2014 exceeded a site-wide groundwater protection standard for one or more organic compounds. A total of two VOCs were reported (cis-1,2 dichloroethene and vinyl chloride) at concentrations above their respective site-wide groundwater protection standards (i.e., screening criteria) in analysis of samples collected in 2014.

Vinyl chloride was reported at a concentration of 35 µg/L and 40 µg/L in the April and October 2014 samples, respectively, collected from monitoring well US03D. Both concentrations exceeded the screening criteria of 2 µg/L.

The concentration of cis-1,2-dichloroethene also exceeded the site-wide groundwater protection standard (i.e., 70 µg/L) in analysis of samples from monitoring well US03D during both semiannual sampling events in 2014. The concentration of cis-1,2 dichloroethene reported from the first and second semiannual sampling events were 240 µg/L and 260 µg/L, respectively.

Exceedances of cis-1,2 dichloroethene and vinyl chloride have been reported in the past from analysis of prior samples from well US03D. The results of both compounds during the 2014 reporting period are within the range established by prior results from these wells. In fact, the concentrations reported (240 and 260 µg/L) are slightly lower than those observed in 2013 (270 and 300 µg/L). Historical concentrations of cis-1,2 dichloroethene, trans-1,2 dichloroethene, and vinyl chloride at monitoring well US03D are summarized in **Table 12**.

As described in prior reports evaluating groundwater quality, vinyl chloride, and cis-1,2 dichloroethene are typical products of the degradation by reductive dechlorination of more highly chlorinated ethenes including trichloroethylene or tetrachloroethylene. As previously discussed, the current results are generally consistent with the data reported in the RI/FS (Montgomery Watson, 1997), the PDI groundwater report, and previous routine monitoring that has been conducted at the Site. There is no indication that the landfill leachate is a source of the vinyl chloride or cis-1,2 dichloroethene, or more highly chlorinated ethenes. As described in **Section 3.3.2.3**, tetrachloroethylene, trichloroethylene, cis-1,2 dichloroethene, or vinyl chloride were not identified above reporting limits in analysis of the leachate samples collected in 2014.

Historical concentrations of VOCs, including vinyl chloride and cis-1,2 dichloroethene at US03D, are discussed in more detail as part of the MNA evaluation in **Subsection 3.4.3** of this report.

3.4.3 Evaluation of the Effectiveness of Monitored Natural Attenuation

The groundwater quality results from 2014 were also evaluated with regard to natural attenuation of chlorinated ethenes in the DSGA. Water quality in the DSGA was evaluated using the following three general lines of evidence that can be used to support demonstrations of natural attenuation, as described in USEPA guidance:

- Historical concentration trends that show decreasing contaminant mass and/or concentration over time
- Hydrogeologic and geochemical data that demonstrate attenuative processes
- Biological microcosm studies that directly demonstrate degradation

As noted in the USEPA guidance document (USEPA, 1999a), the first line of evidence is most conclusive, and natural attenuation processes may be sufficiently characterized without performing all three steps.

3.4.3.1 Historical Concentration Trends

Historically, monitoring well US03D is the only location in the DSGA where VOCs have consistently been identified. Thus, the focus of the monitored natural attenuation evaluation is on the groundwater in the DSGA in the vicinity of US03D. At US03D, vinyl chloride, cis-1,2 dichloroethene, and trans-1,2 dichloroethene were reported during each of the two semiannual monitoring events in 2013. The concentrations of trans-1,2 dichloroethene (48 to 45 µg/L) in 2014 were not above the site-wide groundwater protection standard of 100 µg/L. As shown in **Table 12**, these compounds were also identified in analysis of past samples from well US03D (May 1993 to present), including samples taken during the RI and PDI studies, and during the routine quarterly and semiannual monitoring at the Site.

The concentrations of cis-1,2 dichloroethene, trans-1,2 dichloroethene, and vinyl chloride at US03D are consistent in both semiannual sampling events in 2014. When comparing the results of the two dichloroethene isomers to results from the past five years, it appears that the concentrations are stable to slowly decreasing over time. The vinyl chloride concentrations during this reporting period (2014), and over the last five years, appear to be stable to slightly increasing. The slight increase in vinyl chloride is likely indicative of reductive dechlorination due to the fact that it is a daughter product from the breakdown of the two dichloroethene isomers. Vinyl chloride can also have a slower degradation rate, and thus tends to accumulate. The stable to slightly decreasing concentrations of the two dichloroethene isomers, and the stable to slightly increasing concentrations of vinyl chloride, is evidence of the natural degradation of groundwater contaminants due to microbial activity.

3.4.3.2 Geochemical Data Evaluation

As described in previous reports, guidance for the use of MNA for the cleanup of contaminated soils and groundwater (USEPA, 1999a) outlines a series of geochemical analyses that indirectly support the presence of biodegradation by anaerobic reductive dechlorination pathways. This guidance was originally used to develop the MNA monitoring program at HOD. That MNA program includes a number of these analyses, such as dissolved oxygen, nitrate, ferrous iron, manganese, sulfate, methane, redox potential, pH, alkalinity, and total organic carbon.

Table 13 presents a comparison of the results for a variety of MNA parameters at well US03D collected during the PDI (February and March 2000) and the 2014 monitoring events with the interpretation provided in the MNA guidance. This table indicates that conditions are generally appropriate for anaerobic degradation of chlorinated ethenes present at well US03D.

Geochemical parameters measured in samples from other wells screened in the DSGA (R01D, US01D, US02D, US04D, US05D, W3D, W08D, and VW3) also show generally reducing conditions throughout this aquifer, consistent with historical results. However, the data from these wells typically do not show elevated alkalinity and methane concentrations similar to those that are present at US03D. Thus, while geochemical conditions throughout the DSGA are favorable for degradation of chlorinated ethenes by the reductive dechlorination pathway, the results from US03D show a greater indication that anaerobic degradation is actively occurring in the vicinity of this well.

3.4.3.3 Microbial Activity

Microbial analyses are not currently a part of the current groundwater monitoring program at the HOD Landfill, but based on the similarity of the results of most geochemical parameters at US03D in 2014, compared to the values reported during the PDI, it is expected that microbial activity in the vicinity of this well remains elevated at levels consistent with those measured during the PDI and supportive of MNA.

3.4.3.4 Overall Evaluation of MNA Effectiveness

The analytical data from 2014 continues to support the conclusion that based on the available information; MNA is providing an effective remedy to address the identified exceedances of the site-wide groundwater protection standards in the DSGA. This conclusion is supported by the concentrations of vinyl chloride and the dichloroethene compounds at US03D discussed above, and the absence of VOCs at other wells in the DSGA in the vicinity of the landfill.

3.5 SURFACE WATER MONITORING

In accordance with the approved environmental monitoring program, surface water elevations are recorded and samples are collected at two locations semiannually at the Site. The surface water sampling locations are designated SW01 and SW02. SW01 is located southeast of the landfill in an area that typically retains water. SW02 is located northwest of the landfill, in Sequoit Creek. Of the two surface water sampling points, SW01 is at a higher elevation.

There is a small drainage ditch that runs from east to west along the southern property boundary of the landfill. This drainage ditch collects runoff from the landfill and also conveys water from the vicinity of SW01 to Sequoit Creek. The surface water sampling locations are positioned to assess background conditions (upstream location – SW01) and potential impacts from the Site (downstream location – SW02). The surface water sampling locations are shown on **Figure 1**.

3.5.1 Surface Water Level Measurements

Surface water elevations during the first and second 2014 semiannual sampling events are summarized in **Tables 14** and **15**, respectively. Surface water elevations are determined by observations using a staff gauge. The staff gauge scale (i.e., elevation) is oriented by survey using a known elevation point, and the water level (i.e., stream stage) is then read directly from the staff gauge.

During the 2014 reporting period, surface water levels were recorded at SW02 during both semiannual events and at SW01 during the October event only. The reading in April at SW01 was inadvertently missed.

The surface water elevations in 2014 are consistent with prior data. The elevation of the staff gauge at SW02 was resurveyed in March 2012 as it was reportedly reset in 2011. The elevations at SW02 reported herein are based on the March 2012 survey. No visual impacts to surface water related to the HOD landfill were observed during the 2013 reporting period.

3.5.2 Surface Water Sample Results

During the 2014 reporting period, surface water samples were collected at the upstream (SW01) and downstream (SW02) locations during the first and second semiannual sampling events. During the October sampling event, there was no water at SW01. A surface water sample was obtained from an area of ponded water approximately 200 feet to the east, or upstream, of SW01.

The surface water sample results were screened using the general use water quality standards. There were no exceedances of the screening criteria in review of the results from analysis of the samples collected at SW01 and SW02 during the second semiannual sampling event of 2014. The results from upstream and downstream sampling points are consistent and do not indicate any impacts from the landfill. The surface water monitoring results from this reporting period is included in **Appendix G** and in the EDD in **Appendix E**.

4.0 DATA QUALITY EVALUATION

The review of the first semiannual 2014 monitoring data was presented in the Operations, Maintenance and Monitoring Semiannual report for the first semiannual 2014 monitoring period (January 2014), thus that material is not discussed in this report. The review of the environmental monitoring data from the second semiannual sampling event in 2014, in accordance with the approved revisions to the QAPP, is presented in this section of the report.

Data validation for this reporting period (i.e., second semiannual 2014 sampling event) was accomplished by reviewing information provided by the laboratory (i.e., narratives, chain of custody forms, field information forms, etc.) to determine if there were any issues that would materially affect the data quality. Copies of the laboratory narratives from this period are included for reference in **Appendix H**. The review included assessment of sample handling procedures (i.e., holding times), data from analysis of samples collected to evaluate data quality from the Site (i.e., trip blanks and duplicates), and results from analysis of laboratory control samples (LCSs).

4.1 GENERAL INFORMATION

Samples from 15 groundwater monitoring wells, 2 surface water points, the leachate tank, and water supply well (VW3) were collected by EMT personnel in October 2014. The samples were shipped to TA for laboratory analysis for the parameters indicated in the approved monitoring plan. Upon arrival at TA, samples are checked, logged in, and an acknowledgement form is sent to confirm that samples have reached the laboratory in good condition and within the required method hold time.

Review of the laboratory information associated with the data from the second semiannual 2014 sampling period for the Site indicated that all samples were received intact and within temperature requirements.

4.1.1 Field Samples – Quality Control

Trip blanks are created in the laboratory and accompany the sample containers from the lab, to the field, and back to the lab. The purpose of a trip blank is to assess whether samples were potentially exposed to contaminants during sampling or shipping procedures. TA provided data from analysis of four trip blanks associated with this sampling period. No analytes were quantified at concentrations above the detection limits in analysis of VOCs for the trip blanks associated with the second semiannual sampling event.

Field blank samples are created in the field using the existing sampling equipment and a known clean water source and accompany the samples to the laboratory. Analysis of field blanks can help assess potential impacts from sampling procedures and sampling equipment. No field blank samples were prepared or analyzed during this reporting period, as dedicated sampling is utilized at the Site.

The laboratory performed analysis of one site sample as a matrix spike (MS)/matrix spike duplicate (MSD) for this sampling period. The sample was collected at well R01D. Analysis of the sample as an MSD identified only one parameter (i.e., mercury) where the recovery was outside of the method control limits. Mercury is not a COC at the Site, thus potential issues with matrix inferences and/or quantification are not expected to be significant.

During the second semiannual sampling event, three duplicate samples were collected for laboratory analysis. Duplicate samples were collected at a surface water location (SW01) and from two groundwater monitoring wells (US01D and G102). The samples were submitted to

the laboratory without the location identifier, thus the samples are analyzed "blind." The reproducibility of the data is evaluated as the relative percent difference (RPD) of the two results. Since more variability is expected with lower results, the RPD is only evaluated for analytes where the concentration is a minimum of five times greater than the reporting limit. The comparison of the reported analytes in the duplicate pairs during the second semiannual sampling event is shown in **Table 16**. RPD values were calculated for only those pairs in which both results were above the reporting limit. Constituents reported as less than the reporting limit, or compounds determined to be non-detect on the basis of blank contamination, are not shown.

Using this criteria, the precision between the results is typically acceptable if the RPD is less than or equal to 15 percent. The precision of the data from laboratory analysis of the field duplicates and the groundwater samples from the second semiannual period was within the anticipated range. There were no analytes that exceeded an RPD of 15 percent during this reporting period.

4.2 LABORATORY QUALITY CONTROL

In addition to analysis of samples collected from the Site, the laboratory also analyzes a number of samples within a sample batch to evaluate data quality. Method blanks and trip blanks were analyzed to assess the potential of sample contamination from sample exposure to field and analytical procedures. A method blank is taken through the same preparation and analytical steps as samples from the site. During the second semiannual sampling event no analytes were observed in the method blank or trip blank.

The results from analysis of the LCSs, in association with the second semiannual sampling event, were also evaluated. LCSs provide information about laboratory performance during sample preparation and measurement of performance on a clean water matrix. In cases where there is no preparation step (i.e., dissolved metals), the initial calibration verification standard is used as the LCS. Review of the results from analysis performed in association with the samples from this period indicated that recoveries were outside the control limits for only two parameters; total dissolved solids and biological oxygen demand. The potential laboratory issue with these parameters is not expected to have a material effect on the usability of the data from this period.

MS/MSD samples are also analyzed as LCSs. In this case, the MS/MSD sample is associated with the batch and may not be a sample from the Site. An MS is a sample that is developed using an investigative sample that is spiked with known concentrations of constituents representative of the method analytes and carried through the appropriate steps of the analysis providing information about the effects of the sample matrix on the sample preparation and measurement performance. MS/MSD samples are also selected by the laboratory in accordance with the QAPP for the project and analytical methods. Results for most parameters were within laboratory control limits. For parameters where results were outside the laboratory control limits, the recovery RPD exceedance was minor and likely had no impact on the data. In addition, the associated LCS recovery typically met the laboratory acceptance criteria; therefore, no corrective action was warranted.

The results from analysis of laboratory surrogate spike samples, associated with analysis of the samples collected during the 2014 second semiannual sampling period at the Site, were also evaluated. Laboratory performance for organic analysis was evaluated on individual samples and blanks by spiking the samples and blanks with surrogate compounds and then determining the surrogate spike recoveries. The surrogate recovery for one LCS duplicate was noted to be outside the upper control limit. The remaining spike recoveries were within control limits and the associated sample (VW3) did not contain any target analytes; therefore, reanalysis was not warranted. The remaining surrogate spike recoveries for samples analyzed in association with the samples from the 2014 second semiannual sampling event at the Site were within acceptable limits specified by the method.

Although not specifically associated with data quality, it should be noted that TA diluted a number of samples prior to analysis. The detection and reporting limits were adjusted appropriately. The laboratory also reanalyzed a number of samples for results that were inconsistent with historical results. In general, the reanalysis confirmed the initial result and the original result is reported with the data from this sampling period.

5.0 CONCLUSIONS

Methane was not identified at the ambient air locations or in the perimeter gas probes during this reporting period. The absence of methane, an indicator of landfill gas, at these locations confirms that there is not a gas migration issue and that the gas collection system is operating as designed.

Operation of the gas-to-energy system associated with the HOD Landfill site (Site) was discontinued by District No. 117 in June 2013. Landfill gas from the Site will continue to be collected using an on-site blower and combusted by a pedestal flare at the landfill.

Approximately 435,500 gallons of leachate was removed from the waste mass and disposed of off site in 2014. Approximately 20 million gallons of leachate have been removed since January 2001 (1.4 million gallons/year average). The volume of leachate in 2014 is lower than that removed in prior years. Despite multiple efforts to identify and/or clear the blockage(s), including replacement of sections of the header, leachate removal efforts in 2014 were apparently affected by blockage(s) in the perimeter header pipe that transfers leachate from the wells to the on-site tank.

The reduced volume of leachate extracted in 2013 and 2014 does not appear to have had an adverse impact on groundwater quality in the vicinity of the site.

Leachate levels within the Site, as determined by measurements at the dual extraction wells, remain above the target elevation (761 feet above mean sea level) for an inward gradient at multiple monitoring points. While the decrease in leachate volume removed during this reporting period may have affected levels at some wells, the data from other individual wells (i.e., cycle counters) indicates that despite high pumping rates, the leachate heads remain above the target elevation. In fact, the data over time indicates that achieving the target level at most wells is not feasible.

During this reporting period, samples of groundwater, surface water, leachate, and landfill gas were collected and analyzed in accordance with the approved environmental monitoring program for the Site. The results from the second semiannual sampling event were consistent with prior results. There were no significant data quality issues identified, thus the data from this period is acceptable for use.

Consistent with results from analysis of prior leachate samples, chlorinated ethenes (trichloroethylene, tetrachloroethylene, cis-1,2 dichloroethene, trans-1,2 dichloroethene, or vinyl chloride) were not identified above reporting limits in analysis of the leachate samples collected in 2014. In general, the leachate quality is weak and is not likely a significant contribution to the contaminants in groundwater identified at concentrations above the approved site-wide groundwater protection criteria.

Groundwater elevation data from this reporting period is generally consistent with data from prior measurements at the Site.

No concentrations from analysis of the samples from VW3 during this reporting period exceeded the established site-wide groundwater protection standards for the Site. Low concentrations of several herbicides (picloram and alachlor) were quantified in one or both of the samples during this reporting period, as well as a low concentration of an inorganic salt (orthophosphate).

VOCs (cis-1,2 dichloroethene and vinyl chloride) are only consistently reported at concentrations above the site wide groundwater protection standards (screening criteria) in laboratory analysis of samples from one (i.e., US03D) of the groundwater monitoring wells sampled during this reporting period in the deep sand and gravel aquifer (DSGA). No VOCs were identified at concentrations above the screening criteria in samples from other wells in the DSGA during this reporting period.

Review of groundwater data from this reporting period continues to support the conclusion that natural attenuation is occurring at the site, and in particular in the vicinity of well US03D, to address VOC concentrations (i.e., chlorinated ethenes) in the DSGA.

No site-related impacts were identified by the results from analysis of surface water samples collected during this reporting period.

6.0 RECOMENDATIONS

Continue data collection in 2015 accordance with the approved environmental monitoring plan including:

- Monthly landfills inspections will continue to be performed at the Site.
- Monthly gas quality monitoring will be performed at the blower/flare.
- Leachate and landfill gas monitoring will continue on a quarterly basis during the 2015 reporting period.

- The first semiannual 2015 sampling event is scheduled to occur in April; leachate, groundwater and surface water monitoring will occur along with conducting a site inspection during this event.
- The second semiannual 2015 sampling event is scheduled to occur in October; leachate, groundwater, and surface water monitoring will occur along with conducting a site inspection during this event.

Consider a decrease in the frequency of periodic OM&M reporting at the Site from semiannual to annual. Preliminary evaluation of data, relative to established site-wide protection standards, from the two semiannual periods would continue to be submitted as separate documents within 60 days of the completion of sampling. The detailed data evaluation would be transmitted annually. This is appropriate given that the OM&M activities are established and the Site conditions, as described herein, are generally stable.

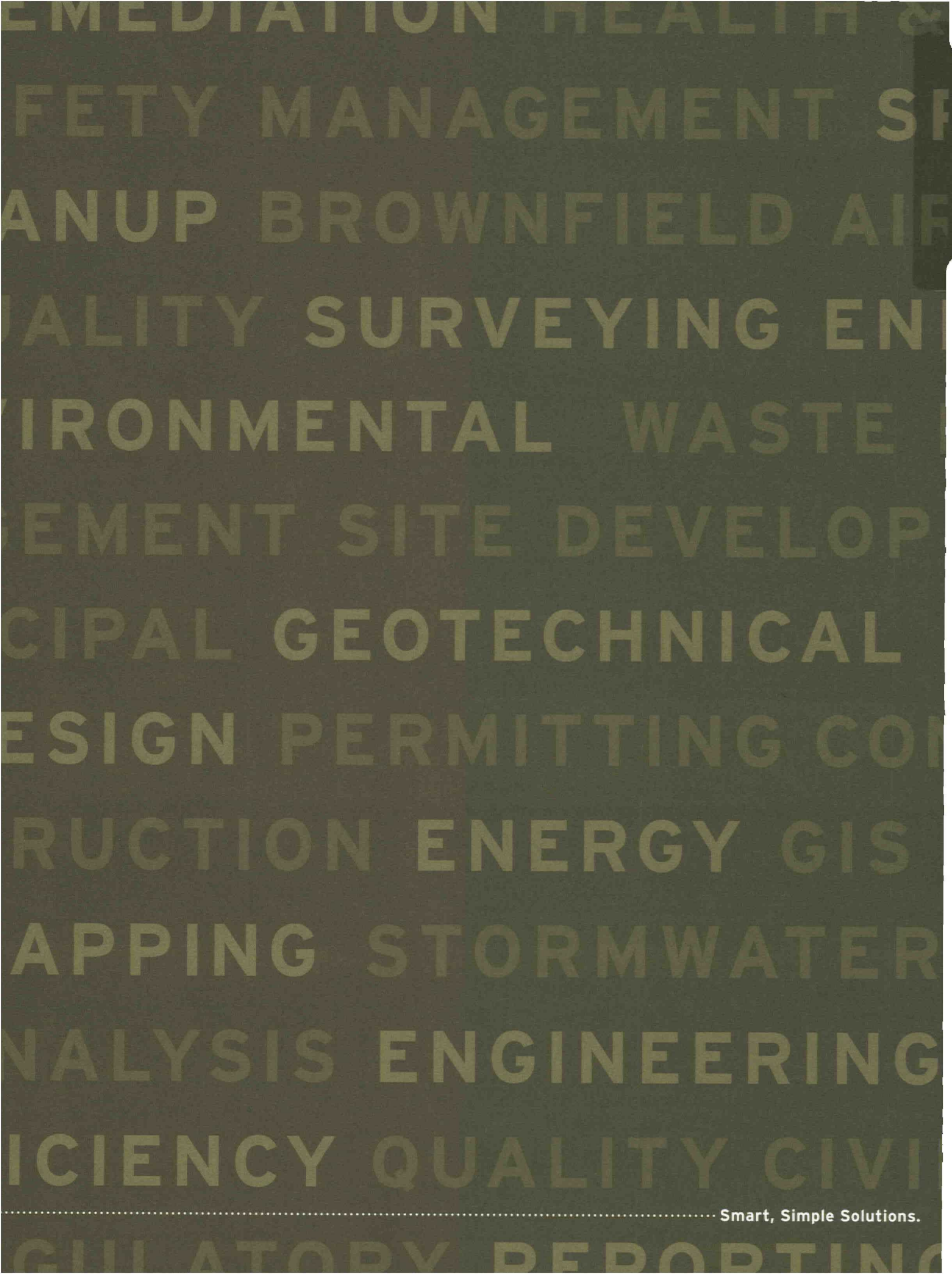
Continue to collect additional information to evaluate the anomalies in leachate head elevations reported at the dual extraction wells. The information would include:

- Verify total well depths and pump intake elevations in conjunction with routine maintenance activities at the site.
- Assess the current method of recording leachate elevations with regard to providing representative data.
- Assess the construction of the dual extraction wells relative to the ability to achieve the target leachate maintenance level.
- Evaluate existing and replacement pump capabilities with regard to maintenance of leachate levels inside the well.

7.0 2015 ACTIVITIES

The USEPA 5-year review will occur during the 2015 reporting period.

Continued groundwater sampling and analysis in accordance with the current plan, unless recommendations identified herein are approved by the USEPA.



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TABLES

Table 1
Environmental Monitoring Schedule
HOD Landfill - Antioch, Illinois

MEDIA	MONITORING FEATURE	FREQUENCY	MONITORING POINTS	PARAMETERS	REFERENCE
Landfill Gas	Perimeter gas monitoring probes	Annually	GP3, GP4A, GP5A, GP6, GP7, GP8	Pressure, CH4, N (as balance gas), O2, CO2, % LEL	35IAC 811.310(c)(3) and (d)(1)
	Gas header blower/flare building	Monthly	Port at inflow to flare unit	Pressure, CH4, N (as balance gas), O2, CO2, flow rate, temperature	35IAC 811.312(d) and O&M Plan
	Ambient Air	Annually	At least 3 locations 1 inch above ground and 100 feet from the edge of the unit	CH4, % LEL	35IAC 811.310(b)(8) and (c)(3)
	Gas extraction wellheads	Quarterly	LP1R, LP2R, LP3, LP4, LP8, LP10, LP11, GWF2, GWF3, GWF4, GWF5, GWF8, GWF10, GW15, GW16, GW17, GW18, GW19, GW20, GW21, GW22, GW23, GW24, GW25R, GW26, GW27, GW28, GW29, GW30, GW31, GW32, GW33R, GW34, MHW, MHE	Pressure, CH4, N (as balance gas), O2, C02, flow rate, temperature	O&M Plan
Leachate	Leachate storage tank	Semiannually	At tank	Table 3 of February 21, 2007, submittal to USEPA (approved 5/17/2007)	35IAC 811.309(g)(1)(2)
		Annually	At tank	Table 3 of February 21, 2007, submittal to USEPA (approved 5/17/2007)	PSVP and O&M Plans
	Leachate loadout	Weekly	Loadout	Volume of leachate hauled off site	O&M Plan
	Leachate extraction wells	Quarterly	LP1R, LP2R, LP3, LP4, LP8, LP10, LP11, GWF2, GWF3, GWF4, GWF5, GWF8, GWF10, GW15, GW16, GW17, GW18, GW19, GW20, GW21, GW22, GW23, GW24, GW25R, GW26, GW27, GW28, GW29, GW30, GW31, GW32, GW33R, GW34, MHW, MHE	Liquid elevation	O&M Plan

Environmental Monitoring Schedule
HOD Landfill - Antioch, Illinois

MEDIA	MONITORING FEATURE	FREQUENCY	MONITORING POINTS	PARAMETERS	REFERENCE
Groundwater	Groundwater monitoring wells	Semiannually/Annually	US1D, W8D, W6S, PZ4U, PZ3U, US6D, W3D, US2D, R1D, US4S, US4D, US3D, US5D, VW-3, US6S, G102	Table 1 of February 21, 2007, submittal to USEPA (approved 5/17/2007) and groundwater elevation	Table 22 of ROD; 35IAC 620.410
	Groundwater monitoring wells	Semiannually	US1S, US6I, W3SA, W3SB, W4S, W5S, US3S, US3I, W2D, PZ1, PZ1U, PZ2U, PZ5U, PZ6U, G14S	Groundwater elevation	PSVP
Surface Water	Sequoit Creek	Semiannually	SW01, SW02	Table 2 of February 21, 2007, submittal to USEPA (approved 5/17/2007)	35IAC 302.202 thru 302.212

Notes:

1. Environmental Monitoring Schedule was taken from Figure 1 on the Performance Standards Verification Plan HOD Landfill Site prepared by RMT, Inc. dated October 2001 / Revised April 2008.

Z:\Projects\25212005.00\Reports\2013\2013 Annual Report\tables\[Table 1 - Environmental Monitoring Schedule.xls]Sheet1

Table 2. HOD LANDFILL, ANTIOCH IL
LANDFILL GAS CONTROL SYSTEM MAINTENANCE LOG
SCS Engineers Project No. 25212005.00

Date	Location	Equipment				Maintenance Activity Description
		Maintained	Repaired	Replaced	New	
1/9/2014	GW28			x		Replaced the flex hose going to the well
1/21/2014	Flare	x				Drained water from the flare
3/7/2014	Flare	x				Calibrated LEL sensors
3/7/2014	Flare	x				Lubricated blower bearings
4/14/2014	Well Field		x			blew compressed air into the force main to locate blockages
4/24/2014	Flare			x		Started SCADA replacement project
5/2/2014	Flare			x		Installed a new vent fan and wiring for the air compressor
5/5/2014	Flare		x			Repaired flare ignitor
5/5/2014	Flare	x				Drained water from the flare
5/7/2014	Compressor	x				Did a full service on the air compressor and dryer
5/22/2014	Well Field		x			Continued testing force main to locate blockage
6/11/2014	Flare	x				Calibrated LEL sensors
6/11/2014	Flare	x				Lubricated blower bearings
7/8/2014	Well Field				x	Installed clean out raisers on the force main on the North East side of the hill
7/9/2014	Well Field	x				Jetted out out force mains on the north and south side of the hill
7/10/2014	Well Field	x				Jetted out out force mains on the north and south side of the hill
7/11/2014	Well Field	x				Jetted out out force mains on the north and south side of the hill
7/14/2014	Well Field	x				Jetted out out force mains on the north and south side of the hill
7/15/2014	Load out pad	x				Jetted out the drain on the load out pad
7/16/2014	GW28					Dug up force main between GW29 and GW28
7/17/2014	GW28			x		Installed a new force main between GW29 and GW28
8/5/2014	LP4			x		Installed a new air pressure regulator
8/5/2014	GW16		x			Cleaned out air pressure regulator

Notes:

1) Compiled from correspondence with WMII Personnel

Z:\Projects\25212005.00\Reports\2014\2014 Annual Report\Tables\[Table 2 - HOD MAINT 2014.xlsx]Sheet1

Table 3. Landfill Gas Monitoring Data at the Blower/Flare
2014 Annual Report
HOD Landfill - Antioch, Illinois / SCS Engineers Project No. 25212005.00

Date	Flow to Flare (cfm)	CH_4 (% by volume)	CO_2 (% by volume)	O_2 (% by volume)	Balance Gas (% by volume)	Flare Combustion Temperature (°F)
1/6/2014	98	26.8	12.5	4.6	56.8	794
2/3/2014	84	30.6	18.6	5.9	44.9	623
3/26/2014	68	39.4	20.2	7.1	33.4	428
4/24/2014	74	42.6	23.2	2.1	32.1	530
5/6/2014	82	47.3	27.1	1.9	23.7	875
6/25/2014	85	49.1	26.2	1.8	22.9	635
7/7/2014	98	68.5	30.7	0.6	0.2	897
8/5/2014	123	49.9	24.9	3.7	21.5	904
9/3/2014	103	54.8	27.5	2.9	14.8	914
10/7/2014	98	37.9	21.4	6.7	34.0	878
11/7/2014	96	26.8	17.5	9.9	45.8	607
12/20/2014	(A)	17.9	10.6	13.7	57.8	1492

Abbreviations:
cfm = cubic feet per minute NR = Not Recorded
°F = Degrees Fahrenheit

Updated By: ZTW 4/2/2015
Checked By: ZTW 6/2/2015

Notes:
1) Data presented in this table was collected by Waste Management.

Footnotes:
(A) The flowmeter reading from this visit was not accurate as it had not yet been recalibrated for the section of pipe where it was relocated that had been recently replaced.

Z:\Projects\25212005.00\Reports\2014\2014 Annual Report\Tables\[Table 3 - Landfill Gas Monitoring Data-BlowerFlare 201

Table 4. Leachate Cycle Counter Readings
2014 Annual Report
HOD Landfill - Antioch, Illinois / SCS Engineers Project No. 25212005.00

Well	First Quarter (March 31, 2014)	Second Quarter (June 26, 2014)	Third Quarter (September 24, 2014)	Fourth Quarter (December 20, 2014)	Difference in Cycle Counter Readings (First and Fourth Quarter 2014)
GW15	199779	199779	199779	199779	0
GW16	558979	559334	559341	669629	110,650
GW17[1]	836947	982530	144362	293017	456,070
GW18	399999	399999	399999	399999	0
GW19	590960	590960	590961	590962	2
GW20	536939	536939	536939	536939	0
GW21	419426	419426	419426	419426	0
GW22	906786	137318	759676	842006	935,220
GW23	1024	1030	1091	1091	67
GW24	898743	899813	899814	900673	1,930
GW25R	33774	33774	33774	33774	0
GW26	306339	306339	306339	306339	0
GW27	823536	823536	823536	823536	0
GW28	546970	546970	567024	547026	56
GW29	920449	366864	622277	838140	917,691
GW30	268431	269492	270257	270268	1,837
GW31	971362	972155	972258	972472	1,110
GW32	463617	463617	463617	463617	0
GW33R	95277	95307	95307	95307	30
GW34	500292	669093	670818	670818	170,526
GWF2	751342	751342	751342	751342	0
GWF3	228683	228683	228683	228684	1
GWF4	253705	253705	253705	253705	0
GWF5	696819	696810	696818	NR	0
GWF8	---	777656	777656	777656	0
GWF10	857206	857290	863785	875733	18,527
LP1R	24628	28322	28322	828322	803,694
LP2R	70032	89488	103042	115758	45,726
LP3	923485	923485	923485	923485	0
LP4	913743	411030	NA	46648	1,132,905
LP8	125562	125562	125562	125562	0
LP10	514967	514967	514967	514967	0
LP11	410369	419658	423859	428064	17,695
MHE	582356	656484	846985	852315	269,959
MHW	208	208	208	208	0
					Total Recorded Cycles
					4,883,696

Abbreviations:

NA= Not Applicable NR = Not Recorded

Notes:

1. Cycle counter readings were recorded by Waste Management.

Updated By: ZTW 4/2/2015
Checked By: ZTW 6/2/2015

Footnotes:

(1) Leachate well GW17 has been short stroking (i.e., not removing its full capacity of leachate each stroke) for an unkown period of time. The number shown in this table represents the cycle counter reading as recorded in the field.

Z:\Projects\25212005.00\Reports\2014\2014 Annual Report\Tables\[Table 4 - Leachate Cycle Counter Readings 2014.xls]Table 4

Table 5. Leachate Levels - Third Quarter (September 24, 2014)
2014 Annual Report
HOD Landfill - Antioch, Illinois / SCS Engineers Project #25212005.00

Well	Top of Flange	Depth to Leachate (feet)	Leachate Elevation (feet amsl)	Site-Wide Average Drawdown Elevation[1] (feet amsl)	Difference in Leachate Elevation from Site-Wide Average Drawdown Elevation (feet)
GW15	785.31	15.70	769.61	761	8.61
GW16	787.67	26.10	761.57	761	0.57
GW17	790.45	29.70	760.75	761	-0.25
GW18	794.37	19.60	774.77	761	13.77
GW19	791.37	27.10	764.27	761	3.27
GW20[2]	786.81	17.20	769.61	761	8.61
GW21[2]	786.86	10.80	776.06	761	15.06
GW22[2]	785.15	14.90	770.25	761	9.25
GW23[2]	784.58	10.60	773.98	761	12.98
GW24[2]	788.88	9.40	779.48	761	18.48
GW25R[2]	788.12	6.10	782.02	761	21.02
GW26[2]	779.39	12.00	767.39	761	6.39
GW27[2]	776.54	10.20	766.34	761	5.34
GW28[2]	779.44	11.00	768.44	761	7.44
GW29[2]	785.69	16.40	769.29	761	8.29
GW30[2]	779.18	12.50	766.68	761	5.68
GW31	792.68	29.60	763.08	761	2.08
GW32	787.98	22.70	765.28	761	4.28
GW33R	785.21	20.40	764.81	761	3.81
GW34	781.88	6.50	775.38	761	14.38
GWF2	793.58	21.30	772.28	761	11.28
GWF3	791.22	28.00	763.22	761	2.22
GWF4	789.67	21.20	768.47	761	7.47
GWF5[2]	782.81	4.40	778.41	761	17.41
GWF8	792.83	21.30	771.53	761	10.53
GWF10	794.12	21.50	772.62	761	11.62
LP1R[2]	782.60	15.20	767.40	761	6.40
LP2R	787.72	23.30	764.42	761	3.42
LP3[2]	782.09	16.40	765.69	761	4.69
LP4	790.82	NA	NA	761	NA
LP8	791.04	21.90	769.14	761	8.14
LP10[2]	782.95	15.5	767.45	761	6.45
LP11	791.10	14.10	777.00	761	16.00
MHE	792.68	30.20	762.48	761	1.48
MHW	792.58	22.00	770.58	761	9.58

Abbreviations:
amsl = above mean sea level NR = Not Recorded NA = Not Applicable

Table 5. Leachate Levels - Third Quarter (September 24, 2014)
2014 Annual Report
HOD Landfill - Antioch, Illinois / SCS Engineers Project #25212005.00

Notes:

1) Top of flange elevations were obtained by R.E. Allen on October 17, 2006 and November 20, 2006.
2) Leachate levels were recorded on September 24, 2014 by Waste Management.

Footnotes:

(1) Based on design estimates and preliminary data, the site-wide average leachate elevation in the landfill was projected to decline to 761 feet amsl in approximately 9 to 15 years (RMT, 2001e).

(2) If the leachate elevations in each of the compliance wells GW20, GW21, GW22, GW23, GW24, GW25R, GW26, GW27, GW28, GW29, GW30 GWF5, LP1R, LP3, and LP10 are below the average groundwater elevation in W05S, W06S, PZ03U, PZ04U, and PZ05U, then inward gradients to the landfill in the area of the shallow sand and gravel aquifer have been established (RMT, 2001e).

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Last revision by:	ZTW	Date:	3/30/2015
Checked by:	ZTW	Date:	6/3/2015

Z:\Projects\25212005.00\Reports\2014\2014 Annual Report\Tables\[Table 5 - Leachate Levels_Third Quarter_Sept 2013.xls]Table 5

Table 6. Leachate Levels - Fourth Quarter (December 20, 2014)
2014 Annual Report
HOD Landfill - Antioch, Illinois / SCS Engineers #25212005.00

Well	Top of Flange	Depth to Leachate (feet)	Leachate Elevation (feet amsl)	Site-Wide Average Drawdown Elevation[1]	Difference in Leachate Elevation from Site-Wide Average Drawdown Elevation (feet)
GW15	785.31	15.9	769.41	761	8.41
GW16	787.67	28.4	759.27	761	-1.73
GW17	790.45	30.1	760.35	761	-0.65
GW18	794.37	8.4	785.97	761	24.97
GW19	791.37	28.6	762.77	761	1.77
GW20[2]	786.81	11.1	775.71	761	14.71
GW21[2]	786.86	10.5	776.36	761	15.36
GW22[2]	785.15	12.2	772.95	761	11.95
GW23[2]	784.58	10.5	774.08	761	13.08
GW24[2]	788.88	9.5	779.38	761	18.38
GW25R[2]	788.12	8.2	779.92	761	18.92
GW26[2]	779.39	14.9	764.49	761	3.49
GW27[2]	776.54	10.4	766.14	761	5.14
GW28[2]	779.44	10.9	768.54	761	7.54
GW29[2]	785.69	15.4	770.29	761	9.29
GW30[2]	779.18	12.6	766.58	761	5.58
GW31	792.68	29.9	762.78	761	1.78
GW32	787.98	23.0	764.98	761	3.98
GW33R	785.21	19.9	765.31	761	4.31
GW34	781.88	6.6	775.28	761	14.28
GWF2	793.58	21.5	772.08	761	11.08
GWF3	791.22	28.7	762.52	761	1.52
GWF4	789.67	21.1	768.57	761	7.57
GWF5[2]	782.81	3.5	779.31	761	18.31
GWF8	792.83	16.2	776.63	761	15.63
GWF10	794.12	20.0	774.12	761	13.12
LP1R[2]	782.60	15.5	767.10	761	6.10
LP2R	787.72	22.7	765.02	761	4.02
LP3[2]	782.09	16.7	765.39	761	4.39
LP4	790.82	14.7	776.12	761	15.12
LP8	791.04	21.6	769.44	761	8.44
LP10[2]	782.95	15.5	767.45	761	6.45
LP11	791.10	14.6	776.50	761	15.50
MHE	792.68	30.0	762.68	761	1.68
MHW	792.58	22.2	770.38	761	9.38

Abbreviations:
amsl = above mean sea level

Table 6. Leachate Levels - Fourth Quarter (December 20, 2014)
2014 Annual Report
HOD Landfill - Antioch, Illinois / SCS Engineers #25212005.00

Notes:
1) Top of flange elevations were obtained by R.E. Allen on October 17, 2006, and November 20, 2006.
2) Leachate levels were recorded on December 20, 2014 by Waste Management.

Footnotes:
[1] Based on design estimates and preliminary data, the site-wide average leachate elevation in the landfill was projected to decline to 761 feet amsl in approximately 9 to 15 years (RMT, 2001e).
[2] If the leachate elevations in each of the compliance wells GW20, GW21, GW22, GW23, GW24, GW25R, GW26, GW27, GW28, GW29, GW30 GWF5, LP1R, LP3, and LP10 are below the average groundwater elevation in W05S, W06S, PZ03U, PZ04U, and PZ05U, then inward gradients to the landfill in the area of the shallow sand and gravel aquifer have been established (RMT, 2001e).

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Last revision by:	ZTW	Date:	4/1/2015
Checked by:	ZTW	Date:	6/3/2015

Z:\Projects\25212005.00\Reports\2014\2014 Annual Report\Tables\[Table 6 - Leachate Levels_Fourth Quarter_Dec 2014.xls]Table 6

Table 7. Leachate Drawdown Performance
2014 Annual Report
HOD Landfill - Antioch, Illinois / SCS Engineers Project No. 25212005.00

Well	January 2001 Leachate Elevation (feet amsl)	Required Elevation Change [1] (feet)	December 20, 2014		
			Actual	Total Delta	Total
			Leachate Elevation (feet, amsl)	Change in Leachate Elevation Since 2001 (feet)	Percent of Required Elevation Change Since 2001
GW15	767.04	-6.04	769.41	2.37	NA
GW16	767.43	-6.43	759.27	-8.16	Achieved
GW17	765.58	-4.58	760.35	-5.23	Achieved
GW18	763.60	-2.60	785.97	22.37	NA
GW19	772.46	-11.46	762.77	-9.69	84.6%
GW20	775.86	-14.86	775.71	-0.15	1.0%
GW21	769.50	-8.50	776.36	6.86	NA
GW22	770.01	-9.01	772.95	2.94	NA
GW23	774.70	-13.70	774.08	-0.62	4.5%
GW24	779.86	-18.86	779.38	-0.48	2.5%
GW25R	781.86	-20.86	779.92	-1.94	9.3%
GW26	765.00	-4.00	764.49	-0.51	12.7%
GW27	766.03	-5.03	766.14	0.11	NA
GW28	765.76	-4.76	768.54	2.78	NA
GW29	778.10	-17.10	770.29	-7.81	45.7%
GW30	765.84	-4.84	766.58	0.74	NA
GW31	764.01	-3.01	762.78	-1.23	40.9%
GW32	761.50	-0.50	764.98	3.48	NA
GW33R	761.80	-0.80	765.31	3.51	NA
GW34	761.77	-0.77	775.28	13.51	NA
GWF2	766.28	-5.28	772.08	5.80	NA
GWF3	767.22	-6.22	762.52	-4.70	75.6%
GWF4 [2]	754.60	0.00	768.57	13.97	NA
GWF5	768.10	-7.10	779.31	11.21	NA
GWF8	779.00	-18.00	776.63	-2.37	13.2%
GWF10	768.65	-7.65	774.12	5.47	NA
LP1R	767.04	-6.04	767.10	0.06	NA
LP2R	771.00	-10.00	765.02	-5.98	59.8%
LP3	765.50	-4.50	765.39	-0.11	2.4%
LP4	773.20	-12.20	776.12	2.92	NA

Table 7. Leachate Drawdown Performance
2014 Annual Report
HOD Landfill - Antioch, Illinois / SCS Engineers Project No. 25212005.00

Well	January 2001 Leachate Elevation (feet amsl)	Required Elevation Change [1] (feet)	December 20, 2014		
			Actual	Total Delta	Total
			Leachate Elevation (feet, amsl)	Change in Leachate Elevation Since 2001 (feet)	Percent of Required Elevation Change Since 2001
LP8	775.40	-14.40	769.44	-5.96	41.4%
LP10	767.10	-6.10	767.45	0.35	NA
LP11	770.88	-9.88	776.50	5.62	NA
MHE	762.10	-1.10	762.68	0.58	NA
MHW	768.50	-7.50	770.38	1.88	NA

Abbreviations:
amsl = above mean sea level NA = Not Achieved

Notes:
1) Leachate elevations were recorded by Waste Management on December 20, 2014.

Footnotes:
[1] Based on design estimates and preliminary data, the site-wide average leachate elevation in the landfill was projected to decline to 761 feet amsl in approximately 9 to 15 years (RMT, 2001e).

[2] The leachate elevation measured at GWF-4 in 2001 was below the required elevation of 761 feet amsl.

Last revision by: ZTW Date: 4/2/2015
Checked by: ZTW Date: 6/3/2015

2014.xls]Table 9

Table 8
Leachate Sample Results Summary
2014 Annual Report
HOD Landfill - Antioch, Illinois / SCS Engineers Project No. 25212005.00

Constituent	Effluent Standards for Off-site Disposal at a Wastewater Treatment Plant (mg/L unless otherwise indicated)[1]	Leachate Sample Results April 18, 2014 (mg/L unless otherwise indicated)	Leachate Sample Results October 21, 2014 (mg/L unless otherwise indicated)
Arsenic	0.25	0.0198	NA
Barium	2.0	0.705	NA
BOD	30	**199 b ***	**104 b**
BOD	30	**51.8 H b**	NA
Cadmium	0.15	ND	NA
Chromium	1.0	0.0516	NA
Copper	0.5	0.144	NA
Cyanide	0.10	0.011	NA
Fluoride	15.0	0.64	NA
Iron	2.0	**60.8**	**50.8**
Lead	0.2	0.0778	NA
Manganese	1.0	0.882	NA
Mercury	0.003 [2]	0.00055	NA
Nickel	1.0	0.0634	NA
pH	6-9 SU	7.69	8.4
Total Recoverable Phenolics	0.3	0.016	NA
Silver	0.1	ND	NA
Zinc	1.0	0.552	NA
Total suspended solids	15.0	**2,020**	**70**

Abbreviations:
mg/L = milligrams per liter NA = Not Analyzed SU = standard units

Laboratory Qualifier:
* = LCS or LCSD exceeds the control limits
b = Result detected in the unseeded control blank
H = Sample was prepped or analyzed beyond the specified holding time

Notes:
1) The screening criteria used in this table are wastewater effluent standards for leachate as identified in Table 4 of the October 2001 PSVP developed by RMT.
2) Bold values indicate sample concentrations above standard.

Footnotes:
[1] Derived from 35 IAC 304.124 through 304.125, concentrations for metals are total.
[2] Interpreted from 135 IAC 304.126.

Last revision by: ZTW Date: 4/7/2015
Checked by: ZTW Date: 6/2/2015

Z:\Projects\25212005.00\Reports\2014\2014 Annual Report\Tables\[Table 8 - Leachate Sample Results Summary 2014.xls]Table 8

Table 9. Groundwater Level Measurements - First Semiannual Monitoring Event
2014 Annual Report
HOD Landfill - Antioch, Illinois / SCS Engineers Project No. 25212005.00

Groundwater Level Measurement Point	Top of Well Elevation (feet amsl)	Depth to Water (feet)	Groundwater Elevation (feet amsl)	Total Well Depth (feet)	Date of Groundwater Level Measurement
Deep Sand and Gravel					
PZ01	788.48	59.51	728.97	119.2	4/17/2014
R01D	774.68	46.10	728.58	101.9	4/17/2014
US01D	768.88	41.00	727.88	95.8	4/17/2014
US02D	770.73	42.38	728.35	112.9	4/17/2014
US03D	769.72	41.17	728.55	83.3	4/17/2014
US04D	772.70	44.32	728.38	105.9	4/17/2014
US05D	767.73	39.30	728.43	96.0	4/17/2014
US06D	770.09	41.87	728.22	85.6	4/17/2014
W02D	773.36	44.73	728.63	90.8	4/17/2014
W03D	765.93	37.60	728.33	80.4	4/17/2014
W08D	768.14	40.00	728.14	96.1	4/17/2014
Intermediate Screened Well					
US03I	769.93	37.79	732.14	59.9	4/17/2014
US06I	770.21	23.98	746.23	65.0	4/17/2014
W03SB	766.81	3.91	762.90	32.6	4/17/2014
Shallow Sand and Gravel					
G102	773.53	10.70	762.83	24.6	4/17/2014
G14S	770.34	4.62	765.72	11.6	4/17/2014
PZ01U	766.41	3.80	762.61	27.1	4/17/2014
PZ02U	768.70	4.59	764.11	16.1	4/17/2014
PZ03U [1]	766.27	2.90	763.37	39.5	4/17/2014
PZ04U [1]	766.49	2.96	763.53	30.0	4/17/2014
PZ05U [1]	771.11	7.15	763.96	34.5	4/17/2014
PZ06U	766.54	3.12	763.42	45.1	4/17/2014
US01S	768.69	4.03	764.66	15.7	4/17/2014
US03S	770.48	8.32	762.16	25.2	4/17/2014
US04S	773.67	11.15	762.52	25.5	4/17/2014
US06S	769.90	6.86	763.04	43.3	4/17/2014
W03SA	766.54	4.50	762.04	17.4	4/17/2014
W04S	769.97	8.03	761.94	16.7	4/17/2014
W05S [1]	773.49	10.53	762.96	17.5	4/17/2014
W06S [1]	767.41	4.21	763.20	17.2	4/17/2014

Abbreviations:
amsl = above mean sea level

April 2014 Average groundwater elevation (W05S, W06S, PZ03U, PZ04U, and PZ05U): 763.40

Notes:
1. Groundwater elevations were collected by Environmental Monitoring and Technologies, Inc. on April 17, 2014.

Footnotes:
1) If the leachate elevations in GW20, GW21, GW22, GW23, GW24, GW25R, GW26, GW27, GW28, GW29, GW30, GWF5, LP1R, LP3, and LP10 are below the average groundwater elevation in W05S, W06S, PZ03U, PZ04U, and PZ05U, then inward gradients to the landfill in the area of the shallow sand and gravel aquifer have been established (RMT, 2001 Performance Standards Verification Plan)

Created by:	MOB	Date:	2/13/2012
Last revision by:	ZTW	Date:	3/31/2015
Checked by:	ZTW	Date:	6/3/2015

Z:\Projects\25212005.00\Reports\2014\2014 Annual Report\Tables\[Table 9 - Groundwater Level Measurements - 1st Event.xls]Table

Table 10. Groundwater Level Measurements - Second Semiannual Monitoring Event
2014 Annual Report
HOD Landfill - Antioch, Illinois / SCS Engineers Project No. 25212005.00

Groundwater Level Measurement Point	Top of Well Elevation (feet amsl)	Depth to Water (feet)	Groundwater Elevation (feet amsl)	Total Well Depth (feet)	Date of Groundwater Level Measurement
Deep Sand and Gravel					
PZ01	788.48	59.41	729.07	119.1	10/21/2014
R01D	774.68	45.07	729.61	101.9	10/21/2014
US01D	768.88	40.23	728.65	95.8	10/21/2014
US02D	770.73	41.82	728.91	112.9	10/21/2014
US03D	769.72	40.95	728.77	83.3	10/21/2014
US04D	772.70	44.00	728.70	105.9	10/21/2014
US05D	767.73	38.73	729.00	96.0	10/21/2014
US06D	770.09	41.17	728.92	85.6	10/21/2014
W02D	773.36	44.14	729.22	90.7	10/21/2014
W03D	765.93	36.75	729.18	80.4	10/21/2014
W08D	768.14	39.40	728.74	96.1	10/21/2014
Intermediate Screened Well					
US03I	769.93	37.03	732.90	59.8	10/21/2014
US06I	770.21	24.07	746.14	64.5	10/21/2014
W03SB	766.81	3.91	762.90	32.5	10/21/2014
Shallow Sand and Gravel					
G102	773.53	10.75	762.78	24.6	10/21/2014
G14S	770.34	7.56	762.78	11.6	10/21/2014
PZ01U	766.41	3.67	762.74	27.0	10/21/2014
PZ02U	768.70	3.97	764.73	16.0	10/21/2014
PZ03U [1]	766.27	3.17	763.10	39.5	10/21/2014
PZ04U [1]	766.49	3.38	763.11	30.0	10/21/2014
PZ05U [1]	771.11	8.00	763.11	34.5	10/21/2014
PZ06U	766.54	3.60	762.94	45.1	10/21/2014
US01S	768.69	4.73	763.96	15.8	10/21/2014
US03S	770.48	8.39	762.09	25.2	10/21/2014
US04S	773.67	10.90	762.77	25.5	10/21/2014
US06S	769.90	7.08	762.82	43.3	10/21/2014
W03SA	766.54	3.79	762.75	17.4	10/21/2014
W04S	769.97	8.08	761.89	16.7	10/21/2014
W05S [1]	773.49	10.70	762.79	17.5	10/21/2014
W06S [1]	767.41	4.49	762.92	17.2	10/21/2014

Abbreviations:
amsl = above mean sea level

October 2014 Average groundwater elevation (W05S, W06S, PZ03U, PZ04U, and PZ05U): 763.01

Notes:
1) Groundwater elevations were collected by Environmental Monitoring and Technologies, Inc. on October 21, 2014.

Footnotes:
1) If the leachate elevations in GW20, GW21, GW22, GW23, GW24, GW25R, GW26, GW27, GW28, GW29, GW30, GWF5, LP1R, LP3, and LP10 are below the average groundwater elevation in W05S, W06S, PZ03U, PZ04U, and PZ05U, then inward gradients to the landfill in the area of the shallow sand and gravel aquifer have been established (RMT, 2001 Performance Standards Verification Plan)

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Last revision by:	ZTW	Date:	3/31/2015
Checked by:	ZTW	Date:	6/3/2015

Z:\Projects\25212005.00\Reports\2014\2014 Annual Report\Tables\[Table 10 - Groundwater Level Measurements - 2nd Event.xls]Table

Table 11. Groundwater Exceedance Summary
2014 Annual Report
HOD Landfill - Antioch, Illinois / SCS Engineers Project No. 25212005.00

Well	Compound	Site-Wide Groundwater Protection Standard [1]	2014 Exceedances	
			First Semiannual Monitoring	Second Semiannual Monitoring
G-102	Chloride, Dissolved (mg/L)	200	371	275
	Iron (µg/L)	5000	4070	6810
US-03D	Chloride, Dissolved (mg/L)	200	256	255
	cis-1,2-Dichloroethene (µg/L)	70	240	260
	Vinyl Chloride (µg/L)	2	35	40
PZ-04U	Manganese, Dissolved (µg/L)	150	--	159
US-04S	Chloride, Dissolved (mg/L)	200	293	283
DUP02 (W-06S)	Chloride, Dissolved (mg/L)	200	422	--
	Manganese, Dissolved (µg/L)	150	341	--
	Sulfate, Dissolved (mg/L)	400	611	--
	Total Dissolved Solids (mg/L)	1,200	2,470	--
W-06S	Chloride, Dissolved (mg/L)	200	418	419
	Manganese, Dissolved (µg/L)	150	337	686
	Sulfate, Dissolved (mg/L)	400	702	468
	Total Dissolved Solids (mg/L)	1,200	2,550	3,210
W-08D	Manganese, Dissolved (µg/L)	150	193	170

Abbreviations:
µg/L = micrograms per liter
mg/L = milligrams per liter
-- = No exceedance was reported during the semiannual monitoring event

Notes:
1. Groundwater samples were collected by EMT during the April and October 2014 semiannual sampling events.

Footnotes:
[1] Groundwater quality standards for the HOD site are listed in Table 1 of the PSVP (RMT, 2001e).

Created by: TLC Date: 1/21/2014
Last revision by: ZTW Date: 4/1/2015
Checked by: ZTW Date: 6/2/2015

Z:\Projects\25212005.00\Reports\2014\2014 Annual Report\Tables\[Table 11 - Groundwater Exceedance Summary_2014.xls]Table

Table 12. Historical VOC Concentrations at US03D
2014 Annual Report
HOD Landfill - Antioch, Illinois / SCS Engineers Project No. 25212005.00

Date	Concentrations (µg/L)		
	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Vinyl Chloride
Site-Wide Groundwater Protection Standard	70 µg/L	100 µg/L	2 µg/L
May 1993 [1]	11 (total 1,2-dichloroethenes)		28
March 1994 [1]	18 (total 1,2-dichloroethenes)		35
February 2000	120	27	19
March 2000	120	25	19
February 2002	150 D	38 D	15
May 2002	180	44	16 J
August 2002	200	44	11 J
November 2002 [2]	170/180	43/46	18 J/17 J
February 2003	180	42	15 J
May 2003	170	41	13 J
August 2003	200	51	17 J
November 2003	170	45	14 J
February 2004	180 D	52	14 J
May 2004	210	55	14 J
August 2004	180	43	11 J
November 2004	200	54	16 J
February 2005	200	50	12 J
May 2005	210 D	55 DJ	10
August 2005	200	42	14 J
November 2005	220	55	14 J
February 2006	240	61	20
May 2006	220 D	66	22
July 2006	250	56	18 J
October 2006	270 D	68	26
April 2007	280	72	30 J
October 2007	270	67	29 J
April 2008	260	56	29 J
October 2008	270 D	65 D	29 DJ
April 2009	220 D	52 D	23 D
October 2009	280	66	28
April 2010	220	51	26
October 2010	260 E	57	28
April 2011	290 [3]	57	34
October 2011	260 [3]	56	35
April 2012	310	66	39
October 2012	300	65	38
April 2013	300	54	42
October 2013	270	47	33
April 2014	240	45	35
October 2014	260	48	40

Abbreviations:
µg/L = micrograms per liter

Notes:
J = Reported value is less than the reporting limit, but greater than zero.
D = Analyte value is from a diluted analysis.
E = Concentration exceeds calibration limit and therefore is semi-qualitative.

Table 12. Historical VOC Concentrations at US03D
2014 Annual Report
HOD Landfill - Antioch, Illinois / SCS Engineers Project No. 25212005.00

Footnotes:
(1) These concentrations were reported in the RI/FS (Montgomery Watson, 1997).
(2) The first concentration listed in each column is from the US03D sample, and the second concentration listed in each column is from the US03D duplicate sample.
(3) The result for cis-1,2-dichloroethene exceeded the calibration range, therefore the sample was reanalyzed. The result of the reanalysis (result not qualified) is reported in this table.

Created by: MOB Date: 2/13/2012
Last revised by ZTW Date: 4/1/2015
Checked by: ZTW Date: 6/3/2015

Z:\Projects\25212005.00\Reports\2014\2014 Annual Report\Tables\[Table 12 - Historical VOC Concentrations at US03D.xls]Table

Table 13. Natural Attenuation Geochemical Parameters in DSGA Well US03D
2014 Annual Report
HOD Landfill - Antioch, Illinois / SCS Engineers Project No. 25212005.00

Analysis	Interpretation	PDI Result	2014 Results	
			April	October
Dissolved Oxygen	<0.5 mg/L most conducive; >5 mg/L not tolerated by anaerobic organisms	≤1 mg/L	3.87 mg/L	0.26 mg/L
Nitrate (Dissolved)	<1 mg/L indicative of no competition between nitrate and the reductive pathway	<0.05 mg/L	<0.02 mg/L	<0.02 mg/L
Iron (II) (Dissolved)	>1 mg/L supportive of reductive pathway	>3 mg/L	3.01 mg/L	3.11 mg/L
Sulfate (Dissolved)	>20 mg/L suggestive of competition with reductive pathway	>40 mg/L	51.5 mg/L	61.4 mg/L
Methane	>0.5 mg/L indicative of strongly reducing conditions conducive to reductive pathway	.0.32 mg/L	0.032 mg/L	0.043 mg/L
Redox Potential	<-100 mV makes the reductive pathway likely	-43 to -98 mV	105.6 mV	-44.1 mV
pH	5 to 9 SU is optimal range for reductive pathway	7.1 to 7.4 SU	7.08 SU	7.38 SU
Total Organic Carbon	>1 mg/L provides the energy needed by microbes to live	2 mg/L	1.9 mg/L	1.0 mg/L

Abbreviations:
SU = Standard units
NA = Not analyzed
mg/L = milligrams per liter
mV = millivolts
DSGA = Deep sand and gravel aquifer
PDI = Predesign investigation results (RMT, 2000a

Notes:
1. Groundwater samples were collected by EMT on April 18 (first semiannual monitoring event) and on October 22, 2014 (second semiannual monitoring event).

Footnotes:
(1) Results from monitoring well US05D, northwest of the landfill, are used for background comparisons.

Created by: MOB Date: 2/13/2012
Last revision by: ZTW Date: 6/1/2015
Checked by: ZTW Date: 6/2/2015

Z:\Projects\25212005.00\Reports\2014\2014 Annual Report\Tables\[Table 13 - Natural Attenuation Geochemical Parameter in DSGA Well US03D.xls]Table

Table 14. Surface Water Level Measurements - First Semiannual Monitoring Event
2014 Annual Report
HOD Landfill - Antioch, Illinois / SCS Engineers Project No. 25212005.00

Surface Water Level Measurement Point	3.0-Foot Staff Gauge Reference Elevation (feet amsl) [1]	Staff Gauge Reading (feet) [2]	Surface Water Elevation (feet amsl) [3]	Date of Surface Water Level Measurement
SW01	765.87	NA[4]	NA[4]	NA
SW02	762.45	2.00	761.45	April 17, 2014

Abbreviations:
amsl = above mean sea level

Notes:
1) Staff gauge readings were recorded by Environmental Monitoring and Technologies, Inc.

Footnotes:
(1) The reference elevation is the elevation (feet amsl) at the 3.0-foot mark on the staff gauge.
(2) The staff gauge reading is the direct reading in feet above the 0.0-foot mark on the staff gauge.
(3) The stream stage elevation is calculated by subtracting the difference (between the staff gauge reading and the staff gauge length) from the reference elevation.
(4) The measurement of the Staff Gauge at SW01 was inadvertently missed

Created by: MOB Date: 2/13/2012
Last revision by: ZTW Date: 4/6/2015
Checked by: ZTW Date: 6/2/2015

Z:\Projects\25212005.00\Reports\2014\2014 Annual Report\Tables\[Table 14 - Surface Water Level Measurements - 1st Event.xls]Table

Table 15. Surface Water Level Measurements - Second Semiannual Monitoring Event
2014 Annual Report
HOD Landfill - Antioch, Illinois / SCS Engineers Project No. 25212005.00

Surface Water Level Measurement Point	3.0-Foot Staff Gauge Reference Elevation (feet amsl) [1]	Staff Gauge Reading (feet) [2]	Surface Water Elevation (feet amsl) [3]	Date of Surface Water Level Measurement Attempts [4]
SW01	765.87	0.17	763.04	October 22, 2014
SW02 [4]	762.45	1.71	761.16	October 22, 2014

Abbreviations:
amsl = above mean sea level NR = Not Recorded

Notes:
1. Staff gauge readings were recorded by Environmental Monitoring and Technologies, Inc.

Footnotes:
[1] The reference elevation is the elevation (feet amsl) at the 3.0-foot mark on the staff gauge.
[2] The staff gauge reading is the direct reading in feet above the 0.0-foot mark on the staff gauge.
[3] The stream stage elevation is calculated by subtracting the difference (between the staff gauge reading and the staff gauge length) from the reference elevation.
[4] Staff gauge SW02 was reinstalled but not surveyed in 2011. On March 13, 2012, SCS Engineers resurveyed the staff gauge at the 3.0-foot mark. That elevation was used to calculate the 2012 surface water elevations.

Created by:	MOB	Date:	2/13/2012
Last revision by:	ZTW	Date:	4/6/2015
Checked by:	ZTW	Date:	6/3/2015

Z:\Projects\25212005.00\Reports\2014\2014 Annual Report\Tables\[Table 15 - Surface Water Level Measurements - 2nd Event.xls]Table

Table 16
Quantified Parameters for the Field Duplicate Pairs
2014 Annual Report
HOD Landfill - Antioch, Illinois / SCS Engineers Project No. 25212005.00

Second Semiannual Monitoring Event (October 2014)					
Parameter	RL	Units	SW01	SW DUP	RPD
Calcium	5,000	UG/L	49,900	46,000	8.1
Magnesium	5,000	UG/L	29,100	29,000	0.3
Manganese	5	UG/L	63.3	58.8	7.4
Chloride	1.70	MG/L	182	177	2.8
Calcium and Magnesium Hardness	500	UG/L	245,000	234,000	4.6
Total Dissolved Solids	5	MG/L	530	526	0.8
Total Dissolved Solids	5	MG/L	537	520	3.2

Second Semiannual Monitoring Event (October 2014)					
Parameter	RL	Units	US-01D	DUP	RPD
Boron, Dissolved	100	UG/L	262	266	1.5
Calcium, Dissolved	5,000	UG/L	63,700	66,400	4.2
Iron, Dissolved	100	UG/L	543	559	2.9
Sulfate	7.5	MG/L	124	123	0.8
Sulfate, Dissolved	7.5	MG/L	128	125	2.4
Alkalinity, Total	10	MG/L	291	288	1.0
Calcium and Magnesium Hardness, Dissolved	500	UG/L	363,000	374,000	3.0
Total Dissolved Solids Field Filtered	5	MG/L	482	470	2.5

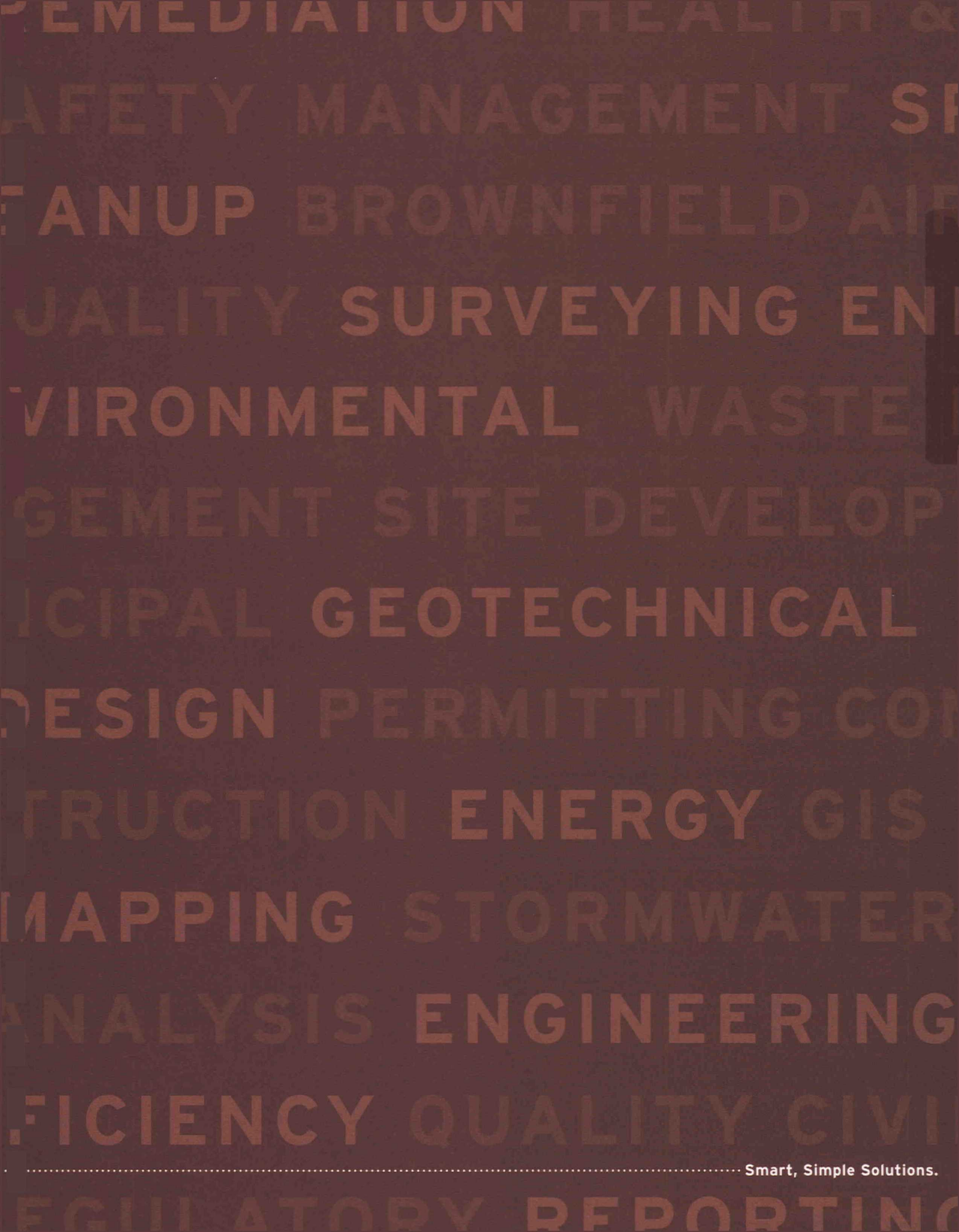
Parameter	RL	Units	G-102	Dup 02	RPD
Calcium, Dissolved	5,000	UG/L	125,000	124,000	0.8
Iron, Dissolved	100	UG/L	6,810	6,600	3.1
Magnesium, Dissolved	5,000	UG/L	55,400	57,000	2.8
Manganese, Dissolved	5	UG/L	105	105	0.0
Chloride, Dissolved	1.7	MG/L	275	277	0.7
Calcium and Magnesium Hardness, Dissolved	500	UG/L	541,000	544,000	0.6
Total Dissolved Solids Field Filtered	5	MG/L	960	937	2.4

Abbreviations:
RL=Reporting Limits
RPD=Relative Percent Difference
DUP = Duplicate
mg/L = milligrams per liter
µg/L = micrograms per liter

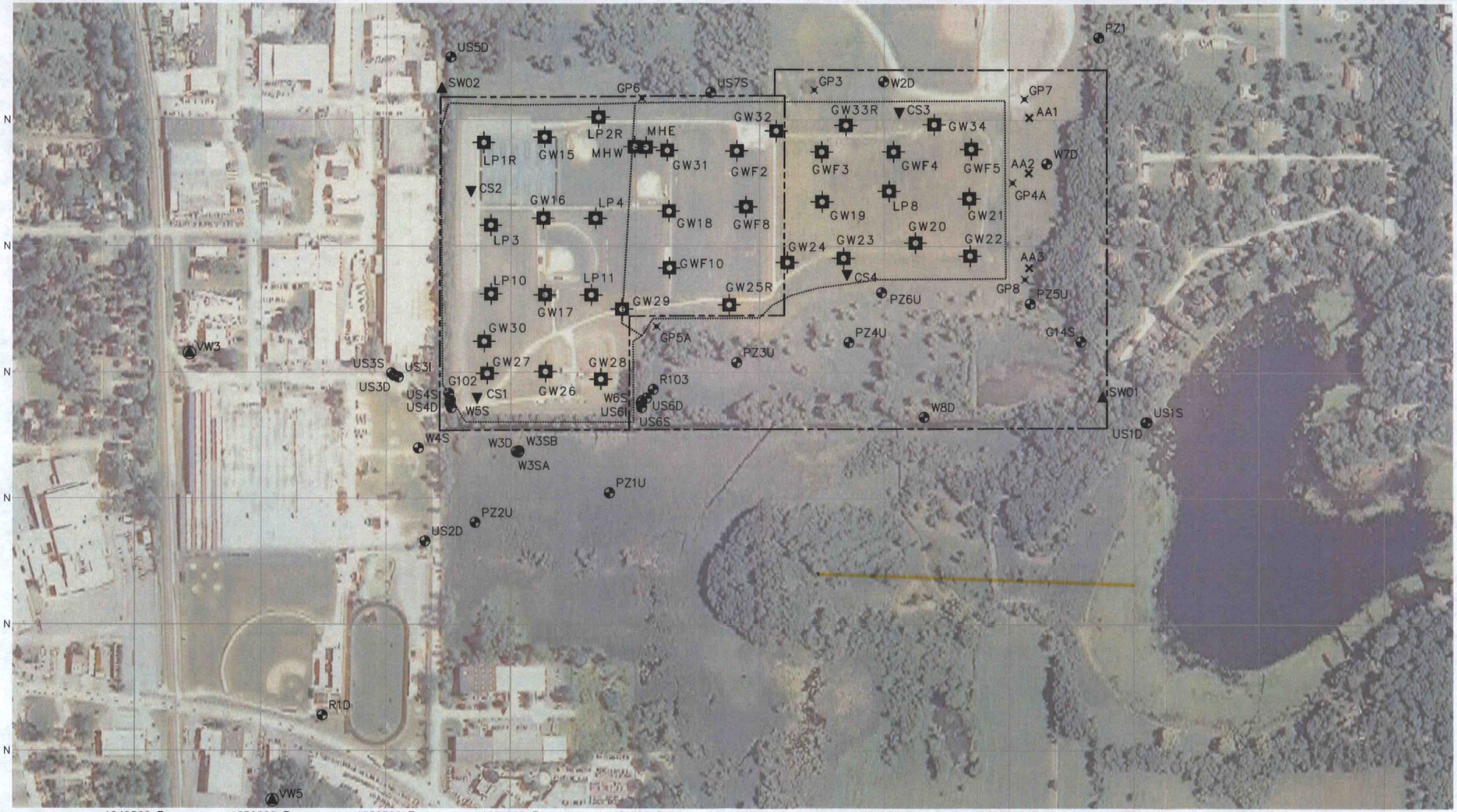
Notes:
1. The RPD is only evaluated for detected analytes where the concentration is a minimum of five times greater than the reporting limit. Using this criteria, the precision between the results is typically acceptable if the RPD is less than or equal to 15 percent.
2. Bolded values indicate an RPD greater than 15 percent.

Created by: MOB Date: 2/13/2012
Last revised by: ZTW Date: 4/3/2015
Checked by: ZTW Date: 6/3/2015

Z:\Projects\25212005.00\Reports\2014\2014 Annual Report\Tables\[Table 16 - Detected Parameters for the Blind Duplicate Pairs - 2014.xls]Table


REMEDIATION
SAFETY MANAGEMENT
CLEANUP
BROWNFIELD
QUALITY
SURVEYING
VIRONMENTAL
WASTE
GEMENT SITE DEVELOP
ICIPAL
GEOTECHNICAL
DESIGN
PERMITTING
TRUCTION
ENERGY
GIS
MAPPING
STORMWATER
ANALYSIS
ENGINEERING
FICIENCY
QUALITY
REGULATORY
REPORTING

FIGURES



LEGEND

- APPROXIMATE PROPERTY LINE
- APPROXIMATE LIMITS OF WASTE
- GAS AND LEACHATE EXTRACTION WELL
- GROUNDWATER MONITORING WELL
- GAS MONITORING PROBE
- SURFACE WATER MONITORING LOCATION
- VILLAGE WATER SUPPLY WELL
- CONDENSATE SUMP
- AMBIENT AIR MONITORING LOCATION

NOTES:

1. SITE PLAN BASED ON LEACHATE DRAWDOWN MAP PREPARED BY RMT, MARCH 2010.
2. 2010 AERIAL PHOTOGRAPH SAVED FROM WWW.WISCONSINVIEW.ORG, KENOSHA COUNTY, WISCONSIN.
3. MONITORING WELLS W7D, R103, AND US7S RETAINED FOR FUTURE USE, IF NECESSARY.

400 0 400

SCALE: 1" = 400'

PROJECT NO.	25212005.00	DRAWN BY:	KP
DRAWN:	02/20/12	CHECKED BY:	RRJ
REVISED:	04/25/13	APPROVED BY:	RRJ

ENGINEER: SCS ENGINEERS, 2830 DAIRY DRIVE MADISON, WI 53718-6751, PHONE: (608) 224-2830

CLIENT: WASTE MANAGEMENT, INC. CLOSED SITES MANAGEMENT GROUPS MENOMINEE FALLS, WI

SITE: HOD LANDFILL ANTIOCH, ILLINOIS

SITE PLAN

FIGURE 1

I:\25212005\Drawings-General\Site.dwg, 7/9/2013 2:17:28 PM

LEGEND

- APPROXIMATE PROPERTY LINE
- APPROXIMATE LIMITS OF WASTE
- GAS AND LEACHATE EXTRACTION WELL
- GROUNDWATER MONITORING WELL
- GAS MONITORING PROBE
- CONDENSATE SUMP
- (3.47) LEACHATE DRAWDOWN ELEVATION (DECEMBER 19, 2013)
- —10— CONTOUR LINE FOR ELEVATION DIFFERENCE REFERENCE TO ELEVATION 761, 2' CONTOUR INTERVAL (DASHED WHERE INFERRED)

NOTES:

1. SITE PLAN BASED ON LEACHATE DRAWDOWN MAP PREPARED BY RMT, MARCH 2010.
2. LEACHATE ELEVATIONS WERE RECORDED BY WASTE MANAGEMENT ON DECEMBER 20, 2014
3. DIFFERENCE IN LEACHATE ELEVATIONS FROM SITE-WIDE AVERAGE DRAWDOWN ELEVATION ARE SUMMARIZED IN TABLE 6 OF THE ANNUAL REPORT.

200 0 200

SCALE: 1" = 200'

PROJECT NO.	25212005.00	DRAWN BY:	KP
DRAWN:	01/20/14	CHECKED BY:	RRJ
REVISED:	04/02/15	APPROVED BY:	

ENGINEER: SCS ENGINEERS, 2830 DAIRY DRIVE MADISON, WI 53718-6751, PHONE: (608) 224-2830

CLIENT: WASTE MANAGEMENT, INC. CLOSED SITES MANAGEMENT GROUPS MENOMINEE FALLS, WI

SITE: HOD LANDFILL ANTIOCH, ILLINOIS

DIFFERENCE IN LEACHATE ELEVATION FROM SITE-WIDE AVERAGE DRAWDOWN ELEVATION, DECEMBER 20, 2014

FIGURE 2

LEGEND

- APPROXIMATE PROPERTY LINE
- APPROXIMATE LIMITS OF WASTE
- GROUNDWATER MONITORING WELL
- SURFACE WATER MONITORING LOCATION
- VILLAGE WATER SUPPLY WELL
- (729.10) POTENTIOMETRIC SURFACE ELEVATION
- POTENTIOMETRIC SURFACE CONTOUR (0.2' CONTOUR INTERVAL)
- APPROXIMATE GROUNDWATER FLOW DIRECTION

NOTES:

1. SITE PLAN BASED ON LEACHATE DRAWDOWN MAP PREPARED BY RMT, MARCH 2010.
2. 2010 AERIAL PHOTOGRAPH SAVED FROM WWW.WISCONSINVIEW.ORG, KENOSHA COUNTY, WISCONSIN.
3. GROUNDWATER ELEVATIONS RECORDED BY EMT, INC. ON APRIL 17, 2014.

400 0 400

SCALE: 1" = 400'

PROJECT NO.	25212005.00	DRAWN BY:	KP
DRAWN:	01/20/14	CHECKED BY:	ZTW
REVISED:	06/02/15	APPROVED BY:	

ENGINEER: SCS ENGINEERS, 2830 DAIRY DRIVE MADISON, WI 53718-6751, PHONE: (608) 224-2830

CLIENT: WASTE MANAGEMENT, INC. CLOSED SITES MANAGEMENT GROUPS MENOMINEE FALLS, WI

SITE: HOD LANDFILL ANTIOCH, ILLINOIS

POTENTIOMETRIC SURFACE MAP
FIRST SEMIANNUAL 2014 MONITORING EVENT

FIGURE 3

LEGEND

- APPROXIMATE PROPERTY LINE
- APPROXIMATE LIMITS OF WASTE
- GROUNDWATER MONITORING WELL
- SURFACE WATER MONITORING LOCATION
- VILLAGE WATER SUPPLY WELL
- (736.93) POTENTIOMETRIC SURFACE ELEVATION
- POTENTIOMETRIC SURFACE CONTOUR (0.2' CONTOUR INTERVAL)
- APPROXIMATE GROUNDWATER FLOW DIRECTION

NOTES:

1. SITE PLAN BASED ON LEACHATE DRAWDOWN MAP PREPARED BY RMT, MARCH 2010.
2. 2010 AERIAL PHOTOGRAPH SAVED FROM WWW.WISCONSINVIEW.ORG, KENOSHA COUNTY, WISCONSIN.
3. GROUNDWATER ELEVATIONS RECORDED BY EMT, INC. ON OCTOBER 21, 2014.
4. PZ1 WAS NOT USED TO DEVELOP THIS POTENTIOMETRIC SURFACE MAP DUE TO AND ANOMALOUS HIGH WATER ELEVATION RECORDED DURING THE OCTOBER 2014 SAMPLING EVENT.

400 0 400

SCALE: 1" = 400'

PROJECT NO.	25212005.00	DRAWN BY:	KP
DRAWN:	01/20/14	CHECKED BY:	ZTW
REVISED:	06/02/15	APPROVED BY:	

ENGINEER: SCS ENGINEERS, 2830 DAIRY DRIVE MADISON, WI 53718-6751, PHONE: (608) 224-2830

CLIENT: WASTE MANAGEMENT, INC. CLOSED SITES MANAGEMENT GROUPS MENOMINEE FALLS, WI

SITE: HOD LANDFILL ANTIOCH, ILLINOIS

POTENTIOMETRIC SURFACE MAP
SECOND SEMIANNUAL 2014 MONITORING EVENT

FIGURE 4

REMEDIATION HEALTH &
AFETY MANAGEMENT SI
ANUP BROWNFIELD AI
UALITY SURVEYING EN
VIRONMENTAL WASTE
GEMENT SITE DEVELOP
ICIPAL GEOTECHNICAL
ESIGN PERMITTING CO
TRUCTION ENERGY GIS
MAPPING STORMWATER
NALYSIS ENGINEERING
FICIENCY QUALITY CIVI
EGULATORY REPORTING

APPENDIX A

Inspection and Maintenance Reports –
Second 2014 Semiannual Period

Sheet 1 of 4
Project No. HOD
Prepared by: Nick
Date: 7-7-14

Facility Inspection Report
HOD Landfill
Antioch, Illinois

Weather: Overcast Temperature: 77

Ground Conditions: Wet

ITEM	COMMENTS/OBSERVATIONS	Adequate	Requires Maintenance
Final Cover			
1.	Vegetation	☒	☐
2.	Erosion	☒	☐
3.	Burrowing	☒	☐
4.	Settlement	☒	☐
5.	Leachate seeps	☒	☐
6.	Other	☐	☐
Access Road			
1.	Accessibility	☒	☐
2.	Other	☐	☐

Sheet 2 of 4
Project No. HOP
Prepared by: Nick
Date: 2-7-14

Groundwater Wells/Gas Probes

Describe below (see next page) the nature of any damage, deterioration, or vandalism observed and required maintenance. At a minimum, the following components of each well and probe shall be inspected: (1) protective casing; (2) well stick-up, cap, and conditions inside protective casing; (3) surface seal; (4) well I.D. label; (5) locks.

1. Identify well/probe number and problems observed, if any. ☒ ☐

Extraction Wells/Condensate Sumps

Inspect well assemblies for loose bolts, cracks in pipes, air or liquid leaks in pipes, broken valve controls, evidence of differential settlement (such as stretching of the flex hose), or other evidence of integrity failure. Describe the nature of any damage, deterioration, or vandalism observed and required maintenance. Identify the extraction well number for problems observed, if any.

1. Differential settlement ☒ ☐
2. Hardware, locks, pipes, and valves ☒ ☐
3. Pump/Sump ☒ ☐
4. Leaks ☒ ☐
5. Other ☐ ☐

Extraction System Piping

1. Header isolation valves ☒ ☐

2. Condensate surging	☒	☐
3. Settlement	☒	☐
4. Other	☐	☐

Compressor Facility

1. Piping, fittings, valves, and seals	☒	☐
2. Compressor	☒	☐
3. Air dryer	☒	☐
4. Exhaust fan	☒	☐
5. Gas sensor	☒	☐
6. Other	☐	☐

Blower Facility

1. Piping, fittings, valves, seals	☒	☐
2. Blower	☒	☐
3. Exhaust fan	☒	☐

Sheet 4 of 4
Project No. HOD
Prepared by: Nick
Date: 7-7-14

4.	Gas sensor	☒	☐
5.	Other	☐	☐

Flare

1.	Flame arrestor	☒	☐
2.	Igniter	☒	☐
3.	Installation	☒	☐
4.	Solenoids	☒	☐
5.	Other	☐	☐

Fencing and Signs

1.	Fencing	☒	☐
2.	Gates and locks	☒	☐
3.	Signs	☒	☐
4.	Other	☐	☐

Sheet 1 of 4
Project No. HOD
Prepared by: Nick
Date: 8-5-14

Facility Inspection Report
HOD Landfill
Antioch, Illinois

Weather: Overcast Temperature: 68

Ground Conditions: wet

ITEM	COMMENTS/OBSERVATIONS	Adequate	Requires Maintenance
Final Cover			
1.	Vegetation	☒	☐
2.	Erosion	☒	☐
3.	Burrowing	☒	☐
4.	Settlement	☒	☐
5.	Leachate seeps	☒	☐
6.	Other	☐	☐
Access Road			
1.	Accessibility	☒	☐
2.	Other	☐	☐

Sheet 2 of 4
Project No. HOP
Prepared by: Nick
Date: 8-5-14

Groundwater Wells/Gas Probes

Describe below (see next page) the nature of any damage, deterioration, or vandalism observed and required maintenance. At a minimum, the following components of each well and probe shall be inspected: (1) protective casing; (2) well stick-up, cap, and conditions inside protective casing; (3) surface seal; (4) well I.D. label; (5) locks.

1. Identify well/probe number and problems observed, if any. ☒ ☐

Extraction Wells/Condensate Sumps

Inspect well assemblies for loose bolts, cracks in pipes, air or liquid leaks in pipes, broken valve controls, evidence of differential settlement (such as stretching of the flex hose), or other evidence of integrity failure. Describe the nature of any damage, deterioration, or vandalism observed and required maintenance. Identify the extraction well number for problems observed, if any.

1. Differential settlement ☒ ☐
2. Hardware, locks, pipes, and valves ☒ ☐
3. Pump/Sump ☒ ☐
4. Leaks ☒ ☐
5. Other ☐ ☐

Extraction System Piping

1. Header isolation valves ☒ ☐

Sheet 3 of 4
Project No. 400
Prepared by: Nick
Date: 8-5-14

2.	Condensate surging	☒	☐
3.	Settlement	☒	☐
4.	Other	☐	☐

Compressor Facility

1.	Piping, fittings, valves, and seals	☒	☐
2.	Compressor	☒	☐
3.	Air dryer	☒	☐
4.	Exhaust fan	☒	☐
5.	Gas sensor	☒	☐
6.	Other	☐	☐

Blower Facility

1.	Piping, fittings, valves, seals	☒	☐
2.	Blower	☒	☐
3.	Exhaust fan	☒	☐

Sheet 4 of 4
Project No. HOD
Prepared by: Nick
Date: 8-5-14

4.	Gas sensor	☒	☐
5.	Other	☐	☐

Flare

1.	Flame arrestor	☒	☐
2.	Igniter	☒	☐
3.	Installation	☒	☐
4.	Solenoids	☒	☐
5.	Other	☐	☐

Fencing and Signs

1.	Fencing	☒	☐
2.	Gates and locks	☒	☐
3.	Signs	☒	☐
4.	Other	☐	☐

Sheet 1 of 4
Project No. HOD
Prepared by: Nick
Date: 9-3-14

Facility Inspection Report
HOD Landfill
Antioch, Illinois

Weather: Sunny Temperature: 50

Ground Conditions: wet

ITEM	COMMENTS/OBSERVATIONS	Adequate	Requires Maintenance
Final Cover			
1.	Vegetation	☒	☐
2.	Erosion	☒	☐
3.	Burrowing	☒	☐
4.	Settlement	☒	☐
5.	Leachate seeps	☒	☐
6.	Other	☐	☐
Access Road			
1.	Accessibility	☒	☐
2.	Other	☐	☐

Sheet 2 of 4
Project No. HOD
Prepared by: Nick
Date: 9-3-14

Groundwater Wells/Gas Probes

Describe below (see next page) the nature of any damage, deterioration, or vandalism observed and required maintenance. At a minimum, the following components of each well and probe shall be inspected: (1) protective casing; (2) well stick-up, cap, and conditions inside protective casing; (3) surface seal; (4) well I.D. label; (5) locks.

1. Identify well/probe number and problems observed, if any. ☒ ☐

Extraction Wells/Condensate Sumps

Inspect well assemblies for loose bolts, cracks in pipes, air or liquid leaks in pipes, broken valve controls, evidence of differential settlement (such as stretching of the flex hose), or other evidence of integrity failure. Describe the nature of any damage, deterioration, or vandalism observed and required maintenance. Identify the extraction well number for problems observed, if any.

1. Differential settlement ☒ ☐
2. Hardware, locks, pipes, and valves ☒ ☐
3. Pump/Sump ☒ ☐
4. Leaks ☒ ☐
5. Other ☐ ☐

Extraction System Piping

1. Header isolation valves ☒ ☐

Sheet 3 of 4
Project No. HOD
Prepared by: Nick
Date: 9-3-14

2. Condensate surging	☒	☐
3. Settlement	☒	☐
4. Other	☐	☐

Compressor Facility

1. Piping, fittings, valves, and seals	☒	☐
2. Compressor	☒	☐
3. Air dryer	☒	☐
4. Exhaust fan	☒	☐
5. Gas sensor	☒	☐
6. Other	☐	☐

Blower Facility

1. Piping, fittings, valves, seals	☒	☐
2. Blower	☒	☐
3. Exhaust fan	☒	☐

4. Gas sensor _____ ☒ ☐

5. Other _____ ☐ ☐

Flare

1. Flame arrestor _____ ☒ ☐

2. Igniter _____ ☒ ☐

3. Installation _____ ☒ ☐

4. Solenoids _____ ☒ ☐

5. Other _____ ☐ ☐

Fencing and Signs

1. Fencing _____ ☒ ☐

2. Gates and locks _____ ☒ ☐

3. Signs _____ ☒ ☐

4. Other _____ ☐ ☐

Sheet 1 of 4
Project No. HOD
Prepared by: Nick
Date: 10/7/14

Facility Inspection Report
HOD Landfill
Antioch, Illinois

Weather: Overcast Temperature: 46

Ground Conditions: wet

ITEM	COMMENTS/OBSERVATIONS	Adequate	Requires Maintenance
Final Cover			
1.	Vegetation	☒	☐
2.	Erosion	☒	☐
3.	Burrowing	☒	☐
4.	Settlement	☒	☐
5.	Leachate seeps	☒	☐
6.	Other	☐	☐
Access Road			
1.	Accessibility	☒	☐
2.	Other	☐	☐

Sheet 2 of 4
Project No. HOD
Prepared by: Nick
Date: 10/7/14

Groundwater Wells/Gas Probes

Describe below (see next page) the nature of any damage, deterioration, or vandalism observed and required maintenance. At a minimum, the following components of each well and probe shall be inspected: (1) protective casing; (2) well stick-up, cap, and conditions inside protective casing; (3) surface seal; (4) well I.D. label; (5) locks.

1. Identify well/probe number and problems observed, if any. _____ ☒ ☐

Extraction Wells/Condensate Sumps

Inspect well assemblies for loose bolts, cracks in pipes, air or liquid leaks in pipes, broken valve controls, evidence of differential settlement (such as stretching of the flex hose), or other evidence of integrity failure. Describe the nature of any damage, deterioration, or vandalism observed and required maintenance. Identify the extraction well number for problems observed, if any.

1. Differential settlement _____ ☒ ☐
2. Hardware, locks, pipes, and valves _____ ☒ ☐
3. Pump/Sump _____ ☒ ☐
4. Leaks _____ ☒ ☐
5. Other _____ ☐ ☐

Extraction System Piping

1. Header isolation valves _____ ☒ ☐

2.	Condensate surging	☒	☐
3.	Settlement	☒	☐
4.	Other	☐	☐

Compressor Facility

1.	Piping, fittings, valves, and seals	☒	☐
2.	Compressor	☒	☐
3.	Air dryer	☒	☐
4.	Exhaust fan	☒	☐
5.	Gas sensor	☒	☐
6.	Other	☐	☐

Blower Facility

1.	Piping, fittings, valves, seals	☒	☐
2.	Blower	☒	☐
3.	Exhaust fan	☒	☐

4.	Gas sensor	☒	☐
5.	Other	☐	☐

Flare

1.	Flame arrestor	☒	☐
2.	Igniter	☒	☐
3.	Installation	☒	☐
4.	Solenoids	☒	☐
5.	Other	☐	☐

Fencing and Signs

1.	Fencing	☒	☐
2.	Gates and locks	☒	☐
3.	Signs	☒	☐
4.	Other	☐	☐

Sheet 1 of 4
Project No. HOD
Prepared by: Nick
Date: 11/7/14

Facility Inspection Report
HOD Landfill
Antioch, Illinois

Weather: Sunny Temperature: 41

Ground Conditions: Dry

ITEM	COMMENTS/OBSERVATIONS	Adequate	Requires Maintenance
Final Cover			
1.	Vegetation	☒	☐
2.	Erosion	☒	☐
3.	Burrowing	☒	☐
4.	Settlement	☒	☐
5.	Leachate seeps	☒	☐
6.	Other	☐	☐
Access Road			
1.	Accessibility	☒	☐
2.	Other	☐	☐

Groundwater Wells/Gas Probes

Describe below (see next page) the nature of any damage, deterioration, or vandalism observed and required maintenance. At a minimum, the following components of each well and probe shall be inspected: (1) protective casing; (2) well stick-up, cap, and conditions inside protective casing; (3) surface seal; (4) well I.D. label; (5) locks.

1. Identify well/probe number and problems observed, if any. ☒ ☐

Extraction Wells/Condensate Sumps

Inspect well assemblies for loose bolts, cracks in pipes, air or liquid leaks in pipes, broken valve controls, evidence of differential settlement (such as stretching of the flex hose), or other evidence of integrity failure. Describe the nature of any damage, deterioration, or vandalism observed and required maintenance. Identify the extraction well number for problems observed, if any.

1. Differential settlement ☒ ☐
2. Hardware, locks, pipes, and valves ☒ ☐
3. Pump/Sump ☒ ☐
4. Leaks ☒ ☐
5. Other ☐ ☐

Extraction System Piping

1. Header isolation valves ☒ ☐

2.	Condensate surging	☒	☐
3.	Settlement	☒	☐
4.	Other	☐	☐

Compressor Facility

1.	Piping, fittings, valves, and seals	☒	☐
2.	Compressor	☒	☐
3.	Air dryer	☒	☐
4.	Exhaust fan	☒	☐
5.	Gas sensor	☒	☐
6.	Other	☐	☐

Blower Facility

1.	Piping, fittings, valves, seals	☒	☐
2.	Blower	☒	☐
3.	Exhaust fan	☒	☐

4.	Gas sensor	☒	☐
5.	Other	☐	☐

Flare

1.	Flame arrestor	☒	☐
2.	Igniter	☒	☐
3.	Installation	☒	☐
4.	Solenoids	☒	☐
5.	Other	☐	☐

Fencing and Signs

1.	Fencing	☒	☐
2.	Gates and locks	☒	☐
3.	Signs	☒	☐
4.	Other	☐	☐

Sheet 1 of 4
Project No. HOD
Prepared by: Nick
Date: 12/20/14

Facility Inspection Report
HOD Landfill
Antioch, Illinois

Weather: Overcast Temperature: 31

Ground Conditions: Frost

ITEM	COMMENTS/OBSERVATIONS	Adequate	Requires Maintenance
Final Cover			
1.	Vegetation	☒	☐
2.	Erosion	☒	☐
3.	Burrowing	☒	☐
4.	Settlement	☒	☐
5.	Leachate seeps	☒	☐
6.	Other	☐	☐
Access Road			
1.	Accessibility	☒	☐
2.	Other	☐	☐

Groundwater Wells/Gas Probes

Describe below (see next page) the nature of any damage, deterioration, or vandalism observed and required maintenance. At a minimum, the following components of each well and probe shall be inspected: (1) protective casing; (2) well stick-up, cap, and conditions inside protective casing; (3) surface seal; (4) well I.D. label; (5) locks.

1. Identify well/probe number and problems observed, if any. ☒ ☐

_____

_____

_____

Extraction Wells/Condensate Sumps

Inspect well assemblies for loose bolts, cracks in pipes, air or liquid leaks in pipes, broken valve controls, evidence of differential settlement (such as stretching of the flex hose), or other evidence of integrity failure. Describe the nature of any damage, deterioration, or vandalism observed and required maintenance. Identify the extraction well number for problems observed, if any.

1. Differential settlement _____ ☒ ☐

_____

_____

2. Hardware, locks, pipes, and valves _____ ☒ ☐

_____

_____

3. Pump/Sump _____ ☒ ☐

_____

_____

4. Leaks _____ ☒ ☐

_____

_____

5. Other _____ ☐ ☐

_____

_____

Extraction System Piping

1. Header isolation valves _____ ☒ ☐

_____

_____

2.	Condensate surging	☒	☐
3.	Settlement	☒	☐
4.	Other	☐	☐

Compressor Facility

1.	Piping, fittings, valves, and seals	☒	☐
2.	Compressor	☒	☐
3.	Air dryer	☒	☐
4.	Exhaust fan	☒	☐
5.	Gas sensor	☒	☐
6.	Other	☐	☐

Blower Facility

1.	Piping, fittings, valves, seals	☒	☐
2.	Blower	☒	☐
3.	Exhaust fan	☒	☐

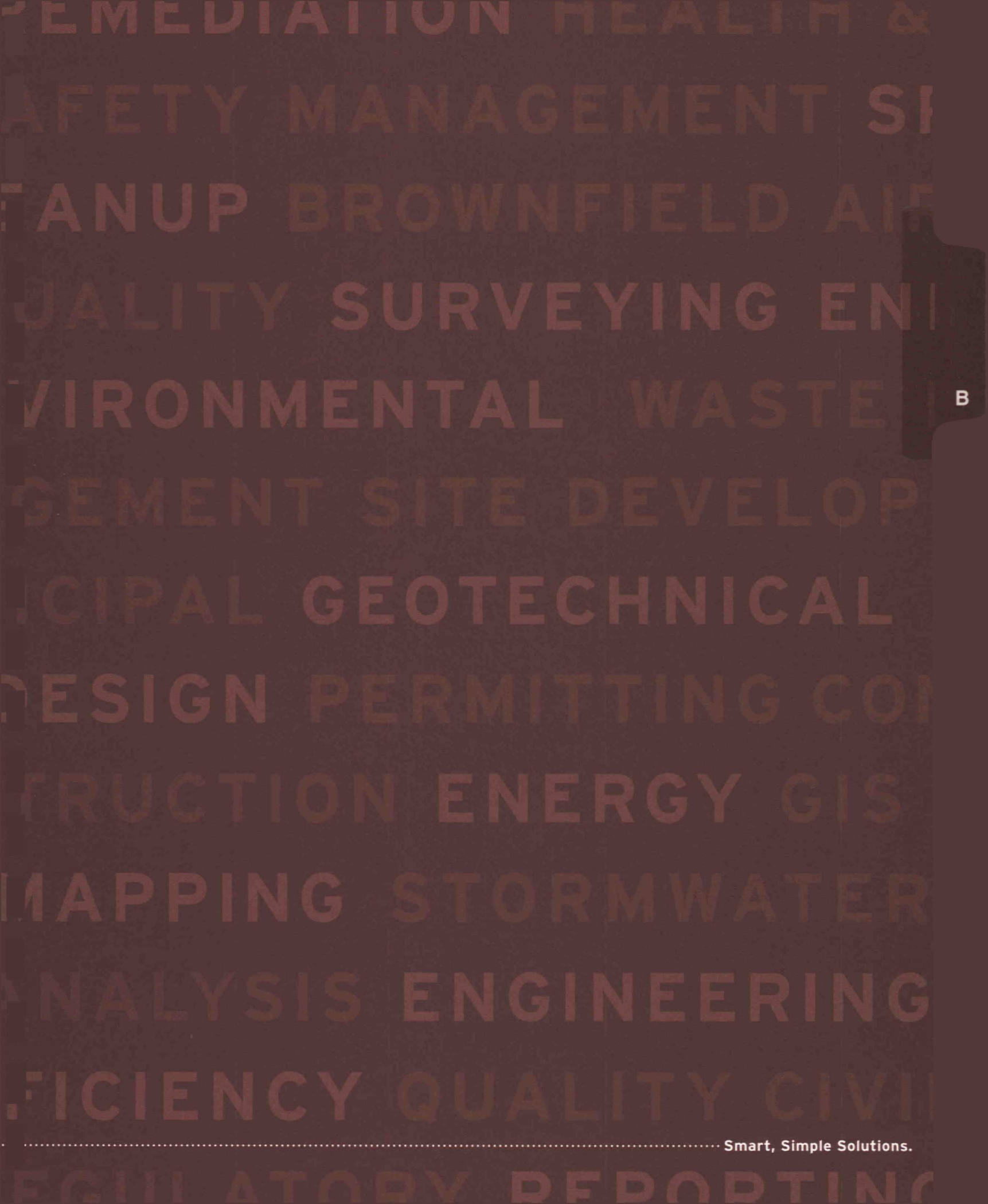
4.	Gas sensor	☒	☐
5.	Other	☐	☐

Flare

1.	Flame arrestor	☒	☐
2.	Igniter	☒	☐
3.	Installation	☒	☐
4.	Solenoids	☒	☐
5.	Other	☐	☐

Fencing and Signs

1.	Fencing	☒	☐
2.	Gates and locks	☒	☐
3.	Signs	☒	☐
4.	Other	☐	☐



Smart, Simple Solutions.

APPENDIX B

2014 Quarterly Landfill Gas and Leachate Monitoring

Landfill Gas/Leachate Monitoring
HOD Landfill
Antioch, Illinois

Person sampling: Nick Carriker Date: 7-7-14 Notes:

Ambient temperature: 77 °F

Barometric pressure: 29.68 in. Hg

Trend in barometric pressure: [redacted]

Weather conditions: Overcast

Ground conditions: wet

Gas/O_2 meter model: GEM2000 Serial #: GM06056

Date last calibrated: 7-7-14

BLOWER/FLARE DATA		
ITEM (UNITS)	INITIAL READINGS	POST ADJUSTMENTS
Flow rate (scfm)	96	
Combustion temperature (°F)	897	
Blower inlet pressure (in H_2O)	-4.1	
Blower outlet pressure (in H_2O)	40	
Blower building valve setting	NA	
Gas inlet temperature (°F)	61	
% CH_4	66.5	
% CO_2	30.7	
% O_2	0.6	
% Balance gas	0.2	

LEACHATE LOADOUT FACILITY DATA

Leachate tank level _____ Feet

Pump operation (hours) _____ Hours

Leachate pumped (gallons) _____ Total gallons

Compressor pressure _____ PSI

Compressor temperature _____ °F

Notes: _____

Totalizer - 38060460

Landfill Gas/Leachate Monitoring
HOD Landfill
Antioch, Illinois

Person sampling: Nick Carriker Date: 8-5-14 Notes: _____

Ambient temperature: 68 °F

Barometric pressure: 30.03 in. Hg

Trend in barometric pressure: _____

Weather conditions: Overcast

Ground conditions: Wet

Gas/O_2 meter model: GEM2000 Serial #: GM08056

Date last calibrated: 8-5-14

BLOWER/FLARE DATA

ITEM (UNITS)	INITIAL READINGS	POST ADJUSTMENTS
Flow rate (scfm)	123	NA
Combustion temperature (°F)	904	
Blower inlet pressure (in H_2O)	-6.1	
Blower outlet pressure (in H_2O)	.41	
Blower building valve setting	NA	
Gas inlet temperature (°F)	74	
% CH_4	49.9	
% CO_2	24.9	
% O_2	3.7	
% Balance gas	21.5	

LEACHATE LOADOUT FACILITY DATA

Leachate tank level _____ Feet

Pump operation (hours) _____ Hours

Leachate pumped (gallons) _____ Total gallons

Compressor pressure _____ PSI

Compressor temperature _____ °F

Notes: _____

Totalizer - 41046000

Landfill Gas/Leachate Monitoring
HOD Landfill
Antioch, Illinois

Person sampling: Nick Carriker Date: 9-3-14 Notes:

Ambient temperature: 50 °F

Barometric pressure: 29.96 in. Hg

Trend in barometric pressure:

Weather conditions: SUNNY

Ground conditions: wet

Gas/O_2 meter model: GEM 2000 Serial #: GM08056

Date last calibrated: 9-3-14

BLOWER/FLARE DATA		
ITEM (UNITS)	INITIAL READINGS	POST ADJUSTMENTS
Flow rate (scfm)	103	
Combustion temperature (°F)	914	
Blower inlet pressure (in H_2O)	-7.6	
Blower outlet pressure (in H_2O)	41	
Blower building valve setting	NA	
Gas inlet temperature (°F)	73	
% CH_4	54.6	
% CO_2	27.5	
% O_2	2.9	
% Balance gas	14.6	

LEACHATE LOADOUT FACILITY DATA

Leachate tank level _____ Feet

Pump operation (hours) _____ Hours

Leachate pumped (gallons) _____ Total gallons

Compressor pressure _____ PSI

Compressor temperature _____ °F

Notes:

Totalizer - 45020710

Landfill Gas/Leachate Monitoring
HOD Landfill
Antioch, Illinois

Weather: Sunny Temperature: 49 °F Technician: Nick Carriker Date: 9/22/2014

Barometric pressure: 30.31 Trend: Notes:

Ground conditions: Wet

Gas/O_2 meter model: GEM 5000 Serial #:

Date last calibrated: 9/22/2014

ITEM (UNITS)	BLOWER/FLARE SYSTEM		GAS-TO-ENERGY SYSTEM	
	INITIAL READINGS	POST ADJUSTMENTS	INITIAL READINGS	POST ADJUSTMENTS
Status (on/off)	ON	ON	NA	NA
Flow rate (cfm)	95.2	102.1	NA	NA
Combustion temperature (°F)	932	1002	NA	NA
Inlet pressure (in w.c.)	-7.0	-9.4	NA	NA
Outlet pressure (in w.c.)	41	41	NA	NA
Blower building valve setting	NA	NA	NA	NA
Gas inlet temperature (°F)	51	50	NA	NA
% CH_4	48.0	49.6	NA	NA
% CO_2	25.5	24.7	NA	NA
% O_2	3.7	2.0	NA	NA
% Balance	22.8	23.7	NA	NA

LEACHATE LOADOUT AND ADDITIONAL BLOWER/FLARE DATA

Leachate tank level	3.15	Feet
Pump operation (hours)	NA	Hours
Compressor pressure	127	psi
Compressor temperature	186	°F
Blower operation (hours)	NA	Hours

Notes: Loadout Pump Cycles:

Blower Cycles:

Compressor Cycles:

Compressor Hours:

TOTALIZER: 47727600

Landfill Gas/Leachate Monitoring
HOD Landfill
Antioch, Illinois
WELL FIELD DATA

LOCATION	WELL-SIDE PRESSURE[1]		HEADER SIDE PRESSURE[1]		% CH_4	% CO_2	% O_2	% BAL.	TEMP.	ORIFICE PLATE DP[1]		VALVE TURNS OPEN[1]		LEACHATE PUMP CYCLE #
	I	P	I	P						I	P	I	P	
GWF-2	-5.9		-5.9		69.2	30.6	0.3	0	74					751342
GWF-3	12.0		12.2		65.1	34.9	0	0	71					228683
GWF-4	-5.6		-6.0		42.6	23.6	6.5	27.3	68					253705
GWF-5	-4.1		-6.0		0.2	0.2	20.5	79.1	71					696818
GWF-8	-5.9		-5.9		72.7	27.2	0	0	68	no orifice plate				777656
GWF-10	-0.2		-6.0		44.6	24.5	6.3	26.4	70	no orifice plate				863785
GW-15	-5.4		-6.0		72.7	27.1	0.2	0	63	no orifice plate				199799
GW-16	-4.8		-6.6		75.9	24.1	0.2	0	70					559341
GW-17	-6.3		-6.7		41.5	20.0	5.0	33.8	60	no orifice plate				144362
GW-18	-5.7		-5.9		66.3	33.4	0.4	0	64	no orifice plate				399999
GW-19	-1.8		-5.9		68.6	26.7	1.1	3.2	63					590961
GW-20	-6.5		-6.7		72.8	27.2	0	0	62					536939
GW-21	-0.2		-6.0		0	0.1	20.9	79.0	66	no orifice plate				419426
GW-22	-5.9		-6.5		63.2	36.7	0.2	0	69	no orifice plate				759676
GW-23	-6.6		-6.6		25.7	7.8	13.6	52.9	64					1091
GW-24	-6.6		-6.6		71.0	29.0	0	0	70	no orifice plate				899814
GW-25R	-1.4		-6.4		70.3	0.4	20.7	78.7	71	no orifice plate				33774
GW-26	-2.1		-7.0		31.5	26.9	1.9	39.9	78	no orifice plate				306339
GW-27	-5.4		-7.0		39.7	29.6	0	30.6	65	no orifice plate				823536

Landfill Gas/Leachate Monitoring
HOD Landfill
Antioch, Illinois
WELL FIELD DATA

LOCATION	WELL-SIDE PRESSURE[1]		HEADER-SIDE PRESSURE[1]		% CH_4	% CO_2	% O_2	% BAL.	TEMP.	ORIFICE PLATE DP[1]		VALVE TURNS OPEN[1]		LEACHATE PUMP CYCLE #
	I	P	I	P						I	P	I	P	
GW-28	-0.6		-6.9		38.2	28.8	1.3	31.9	71	no orifice plate				567024
GW-29	-0.1		-6.6		41.5	28.1	0	30.3	68	no orifice plate				622277
GW-30	-3.2		-6.9		47.0	28.2	0.1	24.7	69	no orifice plate				270257
GW-31	-4.7		-5.9		66.4	13.7	0	0	68	no orifice plate				972258
GW-32	9.1		9.6		72.4	27.6	0	0	72	no orifice plate				463617
GW-33	12.8		12.2		65.2	35.0	0	0	71					95307
GW-34	4.7		4.7		73.2	26.8	0	0	63	no orifice plate				670818
LP1R	-6.0		-6.1		14.7	7.0	14.8	63.7	61	no orifice plate				28322
LP2R	-4.9		-6.1		69.6	28.9	0.6	1.1	52	no orifice plate				103042
LP3	-6.4		-6.5		9.2	2.7	17.5	70.1	62					923485
LP4										no orifice plate				
LP8	-5.1		-6.0		42.6	23.6	6.5	27.3	68					253705
LP10	-6.2		-6.8		48.5	20.2	5.9	26.2	77					514967
LP11	-6.7		-6.8		26.4	12.5	11.6	49.5	62	no orifice plate				423859
MHE	-5.1		-5.9		34.7	17.2	9.3	38.8	63	no orifice plate				846985
MHW	-0.3		-6.0		0.4	0.3	20.1	79.3	74	no orifice plate				208

Notes: I = initial reading; P = post adjustment reading; NC = no change; NR = no reading

Landfill Gas/Leachate Monitoring
HOD Landfill
Antioch, Illinois

GAS PROBE DATA

LOCATION	PRESSURE	% CH_4	LEL CH_4	% O_2	% CO_2	% BAL.
GP3 [2]	0	0		21.5	0	78.4
GP4A	0	0		20.8	0.2	79.0
GP5A	0	0		17.7	2.2	80.1
GP6	0	0		11.8	6.9	81.3
GP7	0	0		19.1	2.3	78.7
GP8	0	0		19.5	2.0	78.5
AA1 [1]	0	0		20.9	0	79.1
AA2 [1]	0	0		20.9	0	79.1
AA3 [1]	0	0		20.9	0	79.1

Notes: [1] Ambient air locations are monitored annually.
[2] Gas probe well casing is above the protective casing. Cannot lock the well.
NA = Not Applicable

Condensate Sump Cycles

CS-1: _____

CS-2: _____

CS-3 _____

CS-4 _____

Landfill Gas/Leachate Monitoring
HOD Landfill
Antioch, Illinois

Person sampling: Nick Carriker Date: 10-7-14 Notes: _____

Ambient temperature: 46 °F

Barometric pressure: 29.62 in. Hg

Trend in barometric pressure: —

Weather conditions: Overcast

Ground conditions: Wet

Gas/O_2 meter model: GEM 2000 Serial #: GM08056

Date last calibrated: 10-7-2014

BLOWER/FLARE DATA

ITEM (UNITS)	INITIAL READINGS	POST ADJUSTMENTS
Flow rate (scfm)	98	NA
Combustion temperature (°F)	878	NA
Blower inlet pressure (in H_2O)	-15.6	NA
Blower outlet pressure (in H_2O)	NA	NA
Blower building valve setting	NA	NA
Gas inlet temperature (°F)	43	NA
% CH_4	37.9	NA
% CO_2	21.4	NA
% O_2	6.7	NA
% Balance gas	34.0	NA

LEACHATE LOADOUT FACILITY DATA

Leachate tank level	2.17	Feet
Pump operation (hours)	—	Hours
Leachate pumped (gallons)	—	Total gallons
Compressor pressure	127	PSI
Compressor temperature	198	°F

Notes: _____

Landfill Gas/Leachate Monitoring
HOD Landfill
Antioch, Illinois

Person sampling: Nick Carriker Date: 11/7/14 Notes:

Ambient temperature: 41 °F

Barometric pressure: 30.17 in. Hg

Trend in barometric pressure: Falling

Weather conditions: Sunny

Ground conditions: Dry

Gas/O_2 meter model: GEM 2K Serial #: GM08056

Date last calibrated: 11/7/2014

BLOWER/FLARE DATA

ITEM (UNITS)	INITIAL READINGS	POST ADJUSTMENTS
Flow rate (scfm)	96	
Combustion temperature (°F)	607	
Blower inlet pressure (in H_2O)	-26.8	
Blower outlet pressure (in H_2O)	NA	
Blower building valve setting	NA	
Gas inlet temperature (°F)	40	
% CH_4	26.8	
% CO_2	17.5	
% O_2	9.9	
% Balance gas	45.8	

LEACHATE LOADOUT FACILITY DATA

Leachate tank level	1.92	Feet
Pump operation (hours)	NA	Hours
Leachate pumped (gallons)	NA	Total gallons
Compressor pressure	126	PSI
Compressor temperature	201	°F

Notes:

Landfill Gas/Leachate Monitoring
HOD Landfill
Antioch, Illinois

Weather: Overcast Temperature: 31 °F Technician: Nick Carriker Date: 12/20/2014

Barometric pressure: 29.38 Trend: Notes:

Ground conditions: Frost

Gas/O_2 meter model: GEM 2000 Serial #: GM08056

Date last calibrated: 12/20/2014

ITEM (UNITS)	BLOWER/FLARE SYSTEM		GAS-TO-ENERGY SYSTEM	
	INITIAL READINGS	POST ADJUSTMENTS	INITIAL READINGS	POST ADJUSTMENTS
Status (on/off)	ON	ON	NA	NA
Flow rate (cfm)	316	261	NA	NA
Combustion temperature (°F)	1492	1326	NA	NA
Inlet pressure (in w.c.)	-21.9	-42.2	NA	NA
Outlet pressure (in.w.c.)	NA	NA	NA	NA
Blower building valve setting	NA	NA	NA	NA
Gas inlet temperature (°F)	41	43	NA	NA
% CH_4	17.9	41.0	NA	NA
% CO_2	10.6	24.3	NA	NA
% O_2	13.7	4.4	NA	NA
% Balance	57.8	30.3	NA	NA

LEACHATE LOADOUT AND ADDITIONAL BLOWER/FLARE DATA

Leachate tank level	2.75	Feet
Pump operation (hours)		Hours
Compressor pressure	122	psi
Compressor temperature	205	°F
Blower operation (hours)		Hours

Notes: Loadout Pump Cycles:

Blower Cycles:

Compressor Cycles:

Compressor Hours: 454710

FLOW TOTALIZER - 62549280

Landfill Gas/Leachate Monitoring
HOD Landfill
Antioch, Illinois

Weather: Overcast Temperature: 31 °F Technician: Nick Carriker Date: 12/20/2014

Barometric pressure: 29.38 Trend: Notes:

Ground conditions: Frost

Gas/O_2 meter model: GEM 2000 Serial #: GM08056

Date last calibrated: 12/20/2014

ITEM (UNITS)	BLOWER/FLARE SYSTEM		GAS-TO-ENERGY SYSTEM	
	INITIAL READINGS	POST ADJUSTMENTS	INITIAL READINGS	POST ADJUSTMENTS
Status (on/off)	ON	ON	NA	NA
Flow rate (cfm)	316	261	NA	NA
Combustion temperature (°F)	1492	1326	NA	NA
Inlet pressure (in w.c.)	-21.9	-42.2	NA	NA
Outlet pressure (in w.c.)	NA	NA	NA	NA
Blower building valve setting	NA	NA	NA	NA
Gas inlet temperature (°F)	41	43	NA	NA
% CH_4	17.9	41.0	NA	NA
% CO_2	10.6	24.3	NA	NA
% O_2	13.7	4.4	NA	NA
% Balance	57.8	30.3	NA	NA

LEACHATE LOADOUT AND ADDITIONAL BLOWER/FLARE DATA

Leachate tank level 2.75 Feet

Pump operation (hours) _____ Hours

Compressor pressure 122 psi

Compressor temperature 205 °F

Blower operation (hours) _____ Hours

Notes: Loadout Pump Cycles:

Blower Cycles:

Compressor Cycles:

Compressor Hours: 454710

FLOW TOTALIZER - 62549280

Landfill Gas/Leachate Monitoring
HOD Landfill
Antioch, Illinois
WELL FIELD DATA

LOCATION	WELL-SIDE PRESSURE[1]		HEADER SIDE PRESSURE[1]		% CH_4	% CO_2	% O_2	% BAL.	TEMP.	ORIFICE PLATE DP[1]		VALVE TURNS OPEN[1]		LEACHATE PUMP CYCLE #
	I	P	I	P						I	P	I	P	
GWF-2	-40.2		-40.2		69.8	30.2	0	0	46					751343
GWF-3	-6.6		-27.7		63.2	28.7	2.3	5.8	44					228684
GWF-4	-41.2		-41.8		0.4	0.5	20.6	78.5	31					253705
GWF-5	-5.3		-42.3		0.1	0.3	20.8	78.8	40					NR
GWF-8	-40.3		-40.3		73.7	25.1	1.1	0.1	33	no orifice plate				NR
GWF-10	-2.2		-40.3		16.5	9.0	15.4	59.1	39	no orifice plate				875733
GW-15	-33.6		-38.7		71.8	27.0	0	1.2	40	no orifice plate				199779
GW-16	-29.7		-38.7		74.8	24.8	0	0.4	47					669629
GW-17	-30.2		-37.9		32.4	22.6	3.2	41.8	46	no orifice plate				293017
GW-18	-38.3		-39.6		67.7	31.1	0	1.2	47	no orifice plate				399999
GW-19	-34.4		-41.9		48.3	20.1	6.4	25.2	46					590962
GW-20	-42.6		-42.6		8.1	4.6	18.4	68.9	32					536939
GW-21	-42.5		-42.5		0.7	0.8	20.8	77.7	34	no orifice plate				419426
GW-22	-42.4		-42.5		1.5	1.4	20.5	76.6	33	no orifice plate				842006
GW-23	-42.7		-42.8		38.1	9.5	10.9	41.5	38					1091
GW-24	-42.7		-42.7		73.6	26.4	0	0	32	no orifice plate				900673
GW-25R	-0.3		-42.9		0.2	0.3	20.7	78.8	32	no orifice plate				33774
GW-26	-6.4		-34.0		8.5	17.6	4.7	69.2	48	no orifice plate				306339
GW-27	-19.7		-35.0		26.9	25.5	0	47.6	43	no orifice plate				823536

Landfill Gas/Leachate Monitoring
HOD Landfill
Antioch, Illinois
WELL FIELD DATA

LOCATION	WELL-SIDE PRESSURE[1]		HEADER-SIDE PRESSURE[1]		% CH_4	% CO_2	% O_2	% BAL.	TEMP.	ORIFICE PLATE DP[1]		VALVE TURNS OPEN[1]		LEACHATE PUMP CYCLE #
	I	P	I	P						I	P	I	P	
GW-28	-1.8		-21.6		23.2	22.9	2.4	51.5	50	no orifice plate				547026
GW-29	-2.0		-42.7		21.1	17.2	8.0	53.7	36	no orifice plate				838140
GW-30	-9.5		-35.7		26.1	25.4	0	48.5	43	no orifice plate				270268
GW-31	-32.1		-39.3		66.5	33.0	0	0.5	43	no orifice plate				972472
GW-32	-21.4		-25.3		62.4	23.3	3.6	10.7	39	no orifice plate				463617
GW-33	-18.0		-22.0		65.4	32.1	0.9	1.6	40					95307
GW-34	-21.9		-22.3		19.6	8.4	15.5	56.5	41	no orifice plate				670818
LP1R	-37.8		-38.4		8.6	4.6	17.5	69.3	46	no orifice plate				828322
LP2R	-31.7		-39.0		70.1	29.3	0.6	0	42	no orifice plate				115758
LP3	-38.7		-38.7		67.2	17.8	3.7	11.3	40					923485
LP4	-38.2		-38.5		73.4	25.2	1.0	0.4	46	no orifice plate				46648
LP8	-40.2		-42.0		70.0	30.0	0	0	36					NR
LP10	-32.0		-37.4		26.5	12.4	11.8	49.3	38					514967
LP11	-37.4		-39.4		1.5	0.6	20.7	77.2	38	no orifice plate				428064
MHE	-35.4		-39.3		44.8	23.0	6.4	25.8	41	no orifice plate				852315
MHW	-1.0		-39.3		0.3	0.5	19.9	79.3	44	no orifice plate				208

Notes: I = initial reading; P = post adjustment reading; NC = no change; NR = no reading

Landfill Gas/Leachate Monitoring
HOD Landfill
Antioch, Illinois

GAS PROBE DATA

LOCATION	PRESSURE	% CH_4	LEL CH_4	% O_2	% CO_2	% BAL.
GP3 (2)	0	0		20.9	0	79.1
GP4A	0	0		20.8	0.1	79.1
GP5A	0	0		19.8	1.4	78.8
GP6	0	0		20.1	1.9	78.0
GP7	0	0		18.9	2.4	78.7
GP8	0	0		19.8	3.1	77.1
AA1 (1)	0	0		20.9	0	79.1
AA2 (1)	0	0		20.9	0	79.1
AA3 (1)	0	0		20.9	0	79.1

Notes: (1) Ambient air locations are monitored annually.
(2) Gas probe well casing is above the protective casing. Cannot lock the well.
NA = Not Applicable

Condensate Sump Cycles

CS-1: _____

CS-2: _____

CS-3 _____

CS-4 _____

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APPENDIX C

Leachate Hauled Off Site and Precipitation Information

Appendix C. Leachate Removed and Precipitation Information
HOD Landfill, Antioch, Illinois / SCS Engineers Project #25212005.00

2014 Annual Monitoring Period							
Month	No. of Days in Month	Leachate Volume Removed (gals)	Precipitation (Inches)	Month	No. of Days in Month	Leachate Volume Removed (gals)	Precipitation (Inches)
January	31	18,000	1.63	July	31	51,500	1.99
February	28	None	1.96	August	31	24,000	7.05
March	31	36,000	1.16	September	30	60,000	3.04
April	30	18,000	4.01	October	31	48,000	3.06
May	31	24,000	5.07	November	30	18,000	1.56
June	30	96,000	8.46	December	31	42,000	0.80

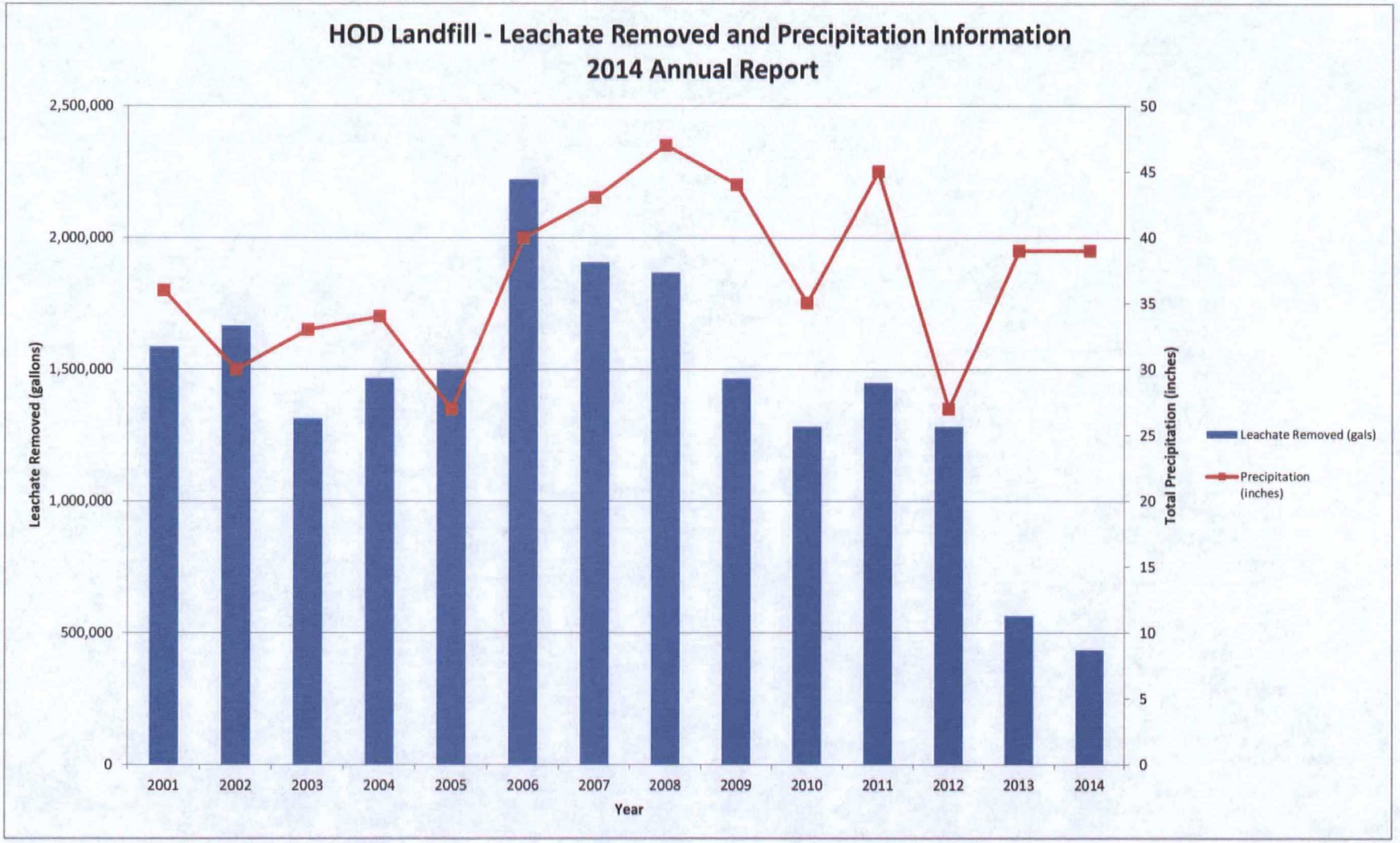
Number of Days for this Reporting Period	365	Total Leachate Removed	435,500	gals
Total Precipitation (inches) for this Reporting Period	39.79	Average	1,193	gals/day

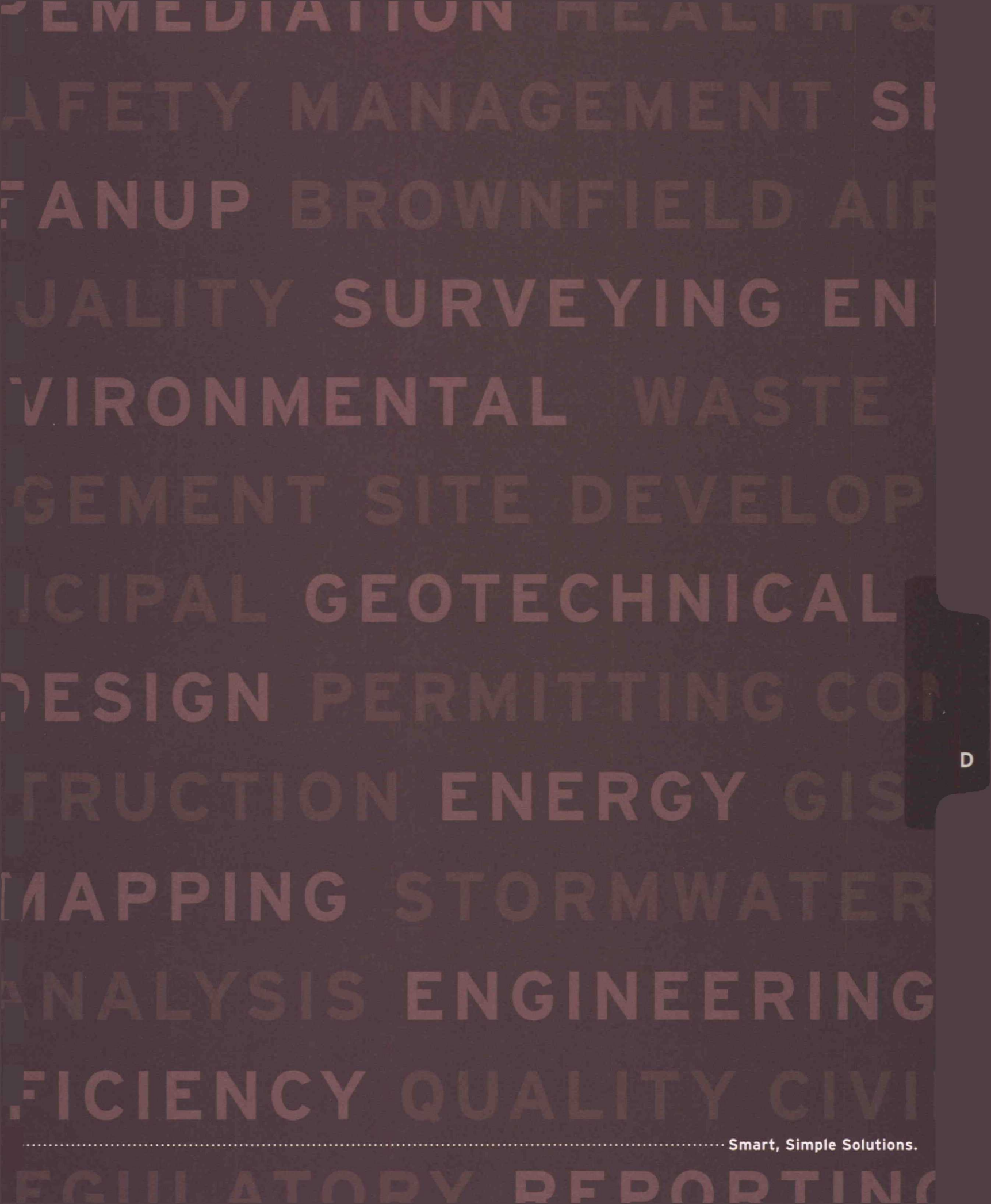
HISTORIC TOTALS					
Year	Leachate Removed (gals)	Precipitation (inches)	Year	Leachate Removed (gals)	Precipitation (inches)
2001	1,586,000	36	2008	1,868,000	47
2002	1,666,000	30	2009	1,466,000	44
2003	1,314,000	33	2010	1,283,000	35
2004	1,466,500	34	2011	1,449,201	45
2005	1,497,500	27	2012	1,282,500	27
2006	2,221,500	40	2013	565,500	39
2007	1,907,100	43	2014	435,500	39

Abbreviations:
gals = gallons

Created by: TLC Date: 1/14/2014
Last revision by: ZTW Date: 4/6/2015
Checked by: ZTW Date: 6/3/2015

Z:\Projects\25212005.00\Reports\2014\2014 Annual Report\Appendicies\Appendix C\[Appendix C - Leachate Removed and Precipitation Information 2014.xls]LeachateRemoved


HOD Landfill - Leachate Removed and Precipitation Information
2014 Annual Report
Leachate Removed (gallons)
Total Precipitation (inches)
Year
2,500,000
2,000,000
1,500,000
1,000,000
500,000
0
50
45
40
35
30
25
20
15
10
5
0
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
Leachate Removed (gals)
Precipitation (inches)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APPENDIX D

Leachate Monitoring Data – 2014

Appendix D
Leachate Results
2014 Annual Report
HOD Landfill - Antioch, Illinois / SCS Engineers Project No. 25212005.00

Sample Date	Sample Point	Parameter	Result	Reporting Limit	Flags	UM
4/18/2014	LCT-01	Fluoride	0.64	0.5		MG/L
4/18/2014	LCT-01	Fluoride, Dissolved	0.6	0.5		MG/L
4/18/2014	LCT-01	Nitrate, Dissolved	3.5	0.02		MG/L
4/18/2014	LCT-01	Chemical Oxygen Demand	223	50		MG/L
4/18/2014	LCT-01	Total Recoverable Phenolics	0.016	0.005		MG/L
4/18/2014	LCT-01	Aldicarb	2.5	2.5	U	UG/L
4/18/2014	LCT-01	Carbofuran	2.5	2.5	U	UG/L
4/18/2014	LCT-01	Endothall	25	25	U	UG/L
4/18/2014	LCT-01	Antimony	10	10	U	UG/L
4/18/2014	LCT-01	Arsenic	19.8	10		UG/L
4/18/2014	LCT-01	Arsenic, Dissolved	14.6	10		UG/L
4/18/2014	LCT-01	Barium	705	200		UG/L
4/18/2014	LCT-01	Barium, Dissolved	556	200		UG/L
4/18/2014	LCT-01	Beryllium	5	5	U	UG/L
4/18/2014	LCT-01	Boron	941	100		UG/L
4/18/2014	LCT-01	Boron, Dissolved	922	100		UG/L
4/18/2014	LCT-01	Cadmium	5	5	U	UG/L
4/18/2014	LCT-01	Cadmium, Dissolved	5	5	U	UG/L
4/18/2014	LCT-01	Calcium, Dissolved	163000	5000		UG/L
4/18/2014	LCT-01	Chromium	51.6	10		UG/L
4/18/2014	LCT-01	Chromium, Dissolved	36.9	10		UG/L
4/18/2014	LCT-01	Cobalt	22.5	10		UG/L
4/18/2014	LCT-01	Cobalt, Dissolved	16.1	10		UG/L
4/18/2014	LCT-01	Copper	144	10		UG/L
4/18/2014	LCT-01	Copper, Dissolved	146	10		UG/L
4/18/2014	LCT-01	Iron	60800	100	^	UG/L
4/18/2014	LCT-01	Iron, Dissolved	46700	100	^	UG/L
4/18/2014	LCT-01	Lead	77.8	3		UG/L
4/18/2014	LCT-01	Lead, Dissolved	64.7	3		UG/L
4/18/2014	LCT-01	Magnesium, Dissolved	75400	5000		UG/L
4/18/2014	LCT-01	Manganese	882	5		UG/L
4/18/2014	LCT-01	Manganese, Dissolved	613	5		UG/L
4/18/2014	LCT-01	Nickel	63.4	10		UG/L
4/18/2014	LCT-01	Nickel, Dissolved	46.3	10		UG/L
4/18/2014	LCT-01	Selenium	8.7	8.7	U	UG/L
4/18/2014	LCT-01	Silver	10	10	U	UG/L
4/18/2014	LCT-01	Silver, Dissolved	10	10	U	UG/L
4/18/2014	LCT-01	Thallium	11	11	U	UG/L
4/18/2014	LCT-01	Zinc	552	20		UG/L
4/18/2014	LCT-01	Zinc, Dissolved	480	20		UG/L
4/18/2014	LCT-01	Antimony, Dissolved	10	10	U	UG/L
4/18/2014	LCT-01	Beryllium, Dissolved	5	5	U	UG/L
4/18/2014	LCT-01	Selenium, Dissolved	5	5	U	UG/L
4/18/2014	LCT-01	Thallium, Dissolved	10	10	U	UG/L
4/18/2014	LCT-01	Mercury	0.55	0.2		UG/L
4/18/2014	LCT-01	Mercury, Dissolved	0.38	0.2		UG/L
4/18/2014	LCT-01	alpha-Chlordane	0.14	0.14	U	UG/L
4/18/2014	LCT-01	Endrin	0.13	0.13	U	UG/L

Appendix D
Leachate Results
2014 Annual Report
HOD Landfill - Antioch, Illinois / SCS Engineers Project No. 25212005.00

Sample Date	Sample Point	Parameter	Result	Reporting Limit	Flags	UM
4/18/2014	LCT-01	gamma-BHC (Lindane)	0.14	0.077		UG/L
4/18/2014	LCT-01	gamma-Chlordane	0.11	0.11	U	UG/L
4/18/2014	LCT-01	Heptachlor	0.15	0.082		UG/L
4/18/2014	LCT-01	Heptachlor epoxide	0.071	0.071	U	UG/L
4/18/2014	LCT-01	Methoxychlor	0.5	0.5	U	UG/L
4/18/2014	LCT-01	Toxaphene	5	5	U	UG/L
4/18/2014	LCT-01	Aroclor 1016	0.47	0.47	U	UG/L
4/18/2014	LCT-01	Aroclor 1221	0.47	0.47	U	UG/L
4/18/2014	LCT-01	Aroclor 1232	0.47	0.47	U	UG/L
4/18/2014	LCT-01	Aroclor 1242	0.47	0.47	U	UG/L
4/18/2014	LCT-01	Aroclor 1248	0.47	0.47	U	UG/L
4/18/2014	LCT-01	Aroclor 1254	0.47	0.47	U	UG/L
4/18/2014	LCT-01	Aroclor 1260	0.47	0.47	U	UG/L
4/18/2014	LCT-01	2,4,5-TP (Silvex)	2	2	U	UG/L
4/18/2014	LCT-01	2,4-D	10	10	U	UG/L
4/18/2014	LCT-01	Dalapon	1	1	U	UG/L
4/18/2014	LCT-01	Dinoseb	1	1	U	UG/L
4/18/2014	LCT-01	Picloram	1	1	U	UG/L
4/18/2014	LCT-01	1,2-Dichlorobenzene	10	10	U *	UG/L
4/18/2014	LCT-01	1,4-Dichlorobenzene	10	10	U	UG/L
4/18/2014	LCT-01	Alachlor	9.6	9.6	U	UG/L
4/18/2014	LCT-01	Atrazine	30	30	U *	UG/L
4/18/2014	LCT-01	Benzo(a)pyrene	13	13	U	UG/L
4/18/2014	LCT-01	Bis(2-ethylhexyl) phthalate	43	43	U	UG/L
4/18/2014	LCT-01	Hexachlorocyclopentadiene	10	10	U *	UG/L
4/18/2014	LCT-01	Pentachlorophenol	35	35	U	UG/L
4/18/2014	LCT-01	Simazine	25	25	U *	UG/L
4/18/2014	LCT-01	Dissolved Cyanide	0.011	0.01		MG/L
4/18/2014	LCT-01	Total Cyanide	0.011	0.01		MG/L
4/18/2014	LCT-01	Chloride	596	6.8		MG/L
4/18/2014	LCT-01	Chloride, Dissolved	605	6.8		MG/L
4/18/2014	LCT-01	Sulfate, Dissolved	139	7.5		MG/L
4/18/2014	LCT-01	1,1,1-Trichloroethane	11	11	U	UG/L
4/18/2014	LCT-01	1,1,2-Trichloroethane	9.5	9.5	U	UG/L
4/18/2014	LCT-01	1,1-Dichloroethene	13	13	U	UG/L
4/18/2014	LCT-01	1,2,4-Trichlorobenzene	2.9	2.9	U	UG/L
4/18/2014	LCT-01	1,2-Dibromo-3-Chloropropane	25	25	U	UG/L
4/18/2014	LCT-01	1,2-Dibromoethane	10	10	U	UG/L
4/18/2014	LCT-01	1,2-Dichloroethane	4.2	4.2	U	UG/L
4/18/2014	LCT-01	1,2-Dichloropropane	8.5	8.5	U	UG/L
4/18/2014	LCT-01	Benzene	8	8	U	UG/L
4/18/2014	LCT-01	Carbon tetrachloride	10	10	U	UG/L
4/18/2014	LCT-01	Chlorobenzene	8	8	U	UG/L
4/18/2014	LCT-01	cis-1,2-Dichloroethene	9	9	U	UG/L
4/18/2014	LCT-01	Ethylbenzene	8	8	U	UG/L
4/18/2014	LCT-01	Methylene Chloride	6.5	6.5	U	UG/L
4/18/2014	LCT-01	Styrene	8.5	8.5	U	UG/L
4/18/2014	LCT-01	Tetrachloroethene	11	11	U	UG/L

Appendix D
Leachate Results
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Sample Date	Sample Point	Parameter	Result	Reporting Limit	Flags	UM
4/18/2014	LCT-01	Toluene	8	8	U	UG/L
4/18/2014	LCT-01	trans-1,2-Dichloroethene	9.5	9.5	U	UG/L
4/18/2014	LCT-01	Trichloroethene	9.5	9.5	U	UG/L
4/18/2014	LCT-01	Vinyl chloride	12	12	U	UG/L
4/18/2014	LCT-01	Xylenes, Total	4.1	4.1	U	UG/L
4/18/2014	LCT-01	Calcium and Magnesium Hardness	879000	500		UG/L
4/18/2014	LCT-01	Total Dissolved Solids Field Filtered	1520	16		MG/L
4/18/2014	LCT-01	Total Suspended Solids	2020	62.5		MG/L
4/18/2014	LCT-01	Biochemical Oxygen Demand	51.8	4	H b	MG/L
4/18/2014	LCT-01	Biochemical Oxygen Demand	199	2	b *	MG/L
10/21/2014	LCT-01	Iron	50800	100		UG/L
10/21/2014	LCT-01	Chloride	811	6.8		MG/L
10/21/2014	LCT-01	1,1-Dichloroethene	13	13	U	UG/L
10/21/2014	LCT-01	cis-1,2-Dichloroethene	9	9	U	UG/L
10/21/2014	LCT-01	Tetrachloroethene	11	11	U	UG/L
10/21/2014	LCT-01	trans-1,2-Dichloroethene	9.5	9.5	U	UG/L
10/21/2014	LCT-01	Trichloroethene	9.5	9.5	U	UG/L
10/21/2014	LCT-01	Vinyl chloride	12	12	U	UG/L
10/21/2014	LCT-01	Total Suspended Solids	70.4	5		MG/L
10/21/2014	LCT-01	Biochemical Oxygen Demand	104	2	b	MG/L

Abbreviations:

UG/L = micrograms per liter
MG/L = milligrams per liter
MG/L AS N = milligrams per liter as nitrogen
MG/L AS P = milligrams per liter as phosphorus
UM = Unit of measure

Laboratory Notes:

b = Result detected in the un-seeded blank
^ = Instrument related QC exceeds the control limits
H = Sample was prepped or analyzed beyond the specified holding time
U = Parameter was not detected
* = LCS or LCSD exceeds the control limits
B = Compound was found in the blank and sample

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APPENDIX E

Electronic Data Deliverable – Second 2014 Semiannual Sampling Event

APPENDIX F

Groundwater Monitoring Data – 2014

Appendix F. Field Parameters
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SAMPLE DATE	SAMPLE POINT	PARAMETER	RESULT	UNITS
4/18/2014	G-102	COLOR, FIELD	None	
		CONDUCTANCE, SPECIFIC	2003	UMHOS/CM
		DEPTH TO BOTTOM	24.61	FEET
		DEPTH TO WATER	10.75	FEET
		GROUNDWATER ELEVATION	762.78	FT AMSL
		EH, FIELD	128.3	MV
		ODOR, FIELD	None	
		OXYGEN, DISSOLVED	1.16	MG/L
		PH, FIELD	7.2	SU
		TEMPERATURE	44.3	DEG F
		TURBIDITY, FIELD	4.02	NTU
4/17/2014	PZ-03U	COLOR, FIELD	None	
		CONDUCTANCE, SPECIFIC	1021	UMHOS/CM
		DEPTH TO BOTTOM	39.50	FEET
		DEPTH TO WATER	2.91	FEET
		GROUNDWATER ELEVATION	763.36	FT AMSL
		EH, FIELD	-100.9	MV
		ODOR, FIELD	None	
		OXYGEN, DISSOLVED	3.53	MG/L
		PH, FIELD	7.03	SU
		TEMPERATURE	53.7	DEG F
		TURBIDITY, FIELD	0.75	NTU
4/17/2014	PZ-04U	COLOR, FIELD	None	
		CONDUCTANCE, SPECIFIC	976	UMHOS/CM
		DEPTH TO BOTTOM	30.03	FEET
		DEPTH TO WATER	2.98	FEET
		GROUNDWATER ELEVATION	763.51	FT AMSL
		EH, FIELD	-73.7	MV
		ODOR, FIELD	None	
		OXYGEN, DISSOLVED	2.51	MG/L
		PH, FIELD	7.13	SU
		TEMPERATURE	51.1	DEG F
		TURBIDITY, FIELD	1.81	NTU

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SAMPLE DATE	SAMPLE POINT	PARAMETER	RESULT	UNITS
4/17/2014	R01D	COLOR, FIELD	None	
		CONDUCTANCE, SPECIFIC	715	UMHOS/CM
		DEPTH TO BOTTOM	101.88	FEET
		DEPTH TO WATER	45.5	FEET
		GROUNDWATER ELEVATION	729.18	FT AMSL
		EH, FIELD	-93.1	MV
		ODOR, FIELD	None	
		OXYGEN, DISSOLVED	1.7	MG/L
		PH, FIELD	8.03	SU
		TEMPERATURE	53.6	DEG F
		TURBIDITY, FIELD	0.4	NTU
4/17/2014	US01D	COLOR, FIELD	None	
		CONDUCTANCE, SPECIFIC	739	UMHOS/CM
		DEPTH TO BOTTOM	95.76	FEET
		DEPTH TO WATER	41.00	FEET
		GROUNDWATER ELEVATION	727.88	FT AMSL
		EH, FIELD	214.3	MV
		ODOR, FIELD	None	
		OXYGEN, DISSOLVED	0.98	MG/L
		PH, FIELD	7.98	SU
		TEMPERATURE	50.4	DEG F
		TURBIDITY, FIELD	1.13	NTU
4/17/2014	US02D	COLOR, FIELD	None	
		CONDUCTANCE, SPECIFIC	771	UMHOS/CM
		DEPTH TO BOTTOM	112.88	FEET
		DEPTH TO WATER	42.05	FEET
		GROUNDWATER ELEVATION	728.68	FT AMSL
		EH, FIELD	-104.1	MV
		ODOR, FIELD	None	
		OXYGEN, DISSOLVED	1.71	MG/L
		PH, FIELD	8.96	SU
		TEMPERATURE	53.1	DEG F
		TURBIDITY, FIELD	0.98	NTU

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SAMPLE DATE	SAMPLE POINT	PARAMETER	RESULT	UNITS
4/18/2014	US03D	COLOR, FIELD	None	
		CONDUCTANCE, SPECIFIC	1446	UMHOS/CM
		DEPTH TO BOTTOM	83.29	FEET
		DEPTH TO WATER	41.22	FEET
		GROUNDWATER ELEVATION	728.5	FT AMSL
		EH, FIELD	105.6	MV
		ODOR, FIELD	None	
		OXYGEN, DISSOLVED	3.87	MG/L
		PH, FIELD	7.08	SU
		TEMPERATURE	55.6	DEG F
		TURBIDITY, FIELD	4.27	NTU
4/18/2014	US04D	COLOR, FIELD	None	
		CONDUCTANCE, SPECIFIC	520	UMHOS/CM
		DEPTH TO BOTTOM	105.91	FEET
		DEPTH TO WATER	44.3	FEET
		GROUNDWATER ELEVATION	728.4	FT AMSL
		EH, FIELD	157.1	MV
		ODOR, FIELD	None	
		OXYGEN, DISSOLVED	1.40	MG/L
		PH, FIELD	8.25	SU
		TEMPERATURE	51	DEG F
		TURBIDITY, FIELD	2.2	NTU
4/17/2014	US04S	COLOR, FIELD	None	
		CONDUCTANCE, SPECIFIC	1510	UMHOS/CM
		DEPTH TO BOTTOM	25.53	FEET
		DEPTH TO WATER	11	FEET
		GROUNDWATER ELEVATION	762.67	FT AMSL
		EH, FIELD	-97.4	MV
		ODOR, FIELD	None	
		OXYGEN, DISSOLVED	2.25	MG/L
		PH, FIELD	7.04	SU
		TEMPERATURE	53.5	DEG F
		TURBIDITY, FIELD	1.01	NTU

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SAMPLE DATE	SAMPLE POINT	PARAMETER	RESULT	UNITS
4/17/2014	US05D	COLOR, FIELD	None	
		CONDUCTANCE, SPECIFIC	558	UMHOS/CM
		DEPTH TO BOTTOM	96.00	FEET
		DEPTH TO WATER	39.30	FEET
		GROUNDWATER ELEVATION	728.93	FT AMSL
		EH, FIELD	276.4	MV
		ODOR, FIELD	None	
		OXYGEN, DISSOLVED	1.6	MG/L
		PH, FIELD	7.48	SU
		TEMPERATURE	52.3	DEG F
		TURBIDITY, FIELD	0.41	NTU
4/18/2014	US06D	COLOR, FIELD	None	
		CONDUCTANCE, SPECIFIC	655	UMHOS/CM
		DEPTH TO BOTTOM	85.57	FEET
		DEPTH TO WATER	41.93	FEET
		GROUNDWATER ELEVATION	728.16	FT AMSL
		EH, FIELD	60.1	MV
		ODOR, FIELD	None	
		OXYGEN, DISSOLVED	2.81	MG/L
		PH, FIELD	8.24	SU
		TEMPERATURE	53	DEG F
		TURBIDITY, FIELD	5.18	NTU
4/18/2014	US06S	COLOR, FIELD	None	
		CONDUCTANCE, SPECIFIC	1206	UMHOS/CM
		DEPTH TO BOTTOM	43.30	FEET
		DEPTH TO WATER	6.95	FEET
		GROUNDWATER ELEVATION	762.95	FT AMSL
		EH, FIELD	11.9	MV
		ODOR, FIELD	None	
		OXYGEN, DISSOLVED	1.2	MG/L
		PH, FIELD	7.43	SU
		TEMPERATURE	50.4	DEG F
		TURBIDITY, FIELD	1.16	NTU

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SAMPLE DATE	SAMPLE POINT	PARAMETER	RESULT	UNITS
4/17/2014	W03D	COLOR, FIELD	None	
		CONDUCTANCE, SPECIFIC	787	UMHOS/CM
		DEPTH TO BOTTOM	80.43	FEET
		DEPTH TO WATER	37.6	FEET
		GROUNDWATER ELEVATION	728.33	FT AMSL
		EH, FIELD	-139.4	MV
		ODOR, FIELD	None	
		OXYGEN, DISSOLVED	1.87	MG/L
		PH, FIELD	7.2	SU
		TEMPERATURE	55.9	DEG F
		TURBIDITY, FIELD	0.95	NTU
4/18/2014	W06S	COLOR, FIELD	None	
		CONDUCTANCE, SPECIFIC	3223	UMHOS/CM
		DEPTH TO BOTTOM	17.20	FEET
		DEPTH TO WATER	4.3	FEET
		GROUNDWATER ELEVATION	763.11	FT AMSL
		EH, FIELD	131.0	MV
		ODOR, FIELD	None	
		OXYGEN, DISSOLVED	3.32	MG/L
		PH, FIELD	8.07	SU
		TEMPERATURE	50.1	DEG F
		TURBIDITY, FIELD	0.51	NTU
4/18/2014	W08D	COLOR, FIELD	None	
		CONDUCTANCE, SPECIFIC	967	UMHOS/CM
		DEPTH TO BOTTOM	96.10	FEET
		DEPTH TO WATER	40.03	FEET
		GROUNDWATER ELEVATION	728.11	FT AMSL
		EH, FIELD	87.1	MV
		ODOR, FIELD	None	
		OXYGEN, DISSOLVED	2.91	MG/L
		PH, FIELD	7.22	SU
		TEMPERATURE	52.7	DEG F
		TURBIDITY, FIELD	7.13	NTU

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SAMPLE DATE	SAMPLE POINT	PARAMETER	RESULT	UNITS
4/18/2014	VW03	COLOR, FIELD	None	
		CONDUCTANCE, SPECIFIC	687	UMHOS/CM
		DEPTH TO BOTTOM		FEET
		DEPTH TO WATER		FEET
		GROUNDWATER ELEVATION		FT AMSL
		EH, FIELD	187.6	MV
		ODOR, FIELD	None	
		OXYGEN, DISSOLVED	2.18	MG/L
		PH, FIELD	7.03	SU
		TEMPERATURE	53.1	DEG F
		TURBIDITY, FIELD	0.28	NTU
4/17/2014	SW01	COLOR, FIELD	None	
		CONDUCTANCE, SPECIFIC	898	UMHOS/CM
		DEPTH TO BOTTOM		FEET
		DEPTH TO WATER		FEET
		GROUNDWATER ELEVATION		FT AMSL
		EH, FIELD	137.2	MV
		ODOR, FIELD	None	
		OXYGEN, DISSOLVED	6.76	MG/L
		PH, FIELD	8.37	SU
		TEMPERATURE	48.9	DEG F
		TURBIDITY, FIELD	3.12	NTU

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SAMPLE DATE	SAMPLE POINT	PARAMETER	RESULT	UNITS
4/17/2014	SW02	COLOR, FIELD	None	
		CONDUCTANCE, SPECIFIC	967	UMHOS/CM
		DEPTH TO BOTTOM		FEET
		DEPTH TO WATER		FEET
		GROUNDWATER ELEVATION		FT AMSL
		EH, FIELD	96.3	MV
		ODOR, FIELD	None	
		OXYGEN, DISSOLVED	5.74	MG/L
		PH, FIELD	8.47	SU
		TEMPERATURE	47.8	DEG F
		TURBIDITY, FIELD	4.78	NTU
10/21/2014	G102	COLOR, FIELD	None	
		CONDUCTANCE, SPECIFIC	1,752	UMHOS/CM
		DEPTH TO BOTTOM	24.61	FEET
		DEPTH TO WATER	11.90	FEET
		GROUNDWATER ELEVATION	761.63	FT AMSL
		EH, FIELD	-101.6	MV
		ODOR, FIELD	None	
		OXYGEN, DISSOLVED	0.6	MG/L
		PH, FIELD	7.01	SU
		TEMPERATURE	54.5	DEG F
		TURBIDITY, FIELD	11.2	NTU
10/21/2014	PZ03U	COLOR, FIELD	None	
		CONDUCTANCE, SPECIFIC	1,215	UMHOS/CM
		DEPTH TO BOTTOM	39.50	FEET
		DEPTH TO WATER	3.18	FEET
		GROUNDWATER ELEVATION	763.09	FT AMSL
		EH, FIELD	-88.3	MV
		ODOR, FIELD	None	
		OXYGEN, DISSOLVED	2.93	MG/L
		PH, FIELD	6.85	SU
		TEMPERATURE	49.9	DEG F
		TURBIDITY, FIELD	0.63	NTU

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SAMPLE DATE	SAMPLE POINT	PARAMETER	RESULT	UNITS
10/21/2014	PZ04U	COLOR, FIELD	None	
		CONDUCTANCE, SPECIFIC	1,048	UMHOS/CM
		DEPTH TO BOTTOM	30.03	FEET
		DEPTH TO WATER	3.31	FEET
		GROUNDWATER ELEVATION	763.18	FT AMSL
		EH, FIELD	-102.7	MV
		ODOR, FIELD	None	
		OXYGEN, DISSOLVED	2.89	MG/L
		PH, FIELD	6.98	SU
		TEMPERATURE	47.9	DEG F
		TURBIDITY, FIELD	1.54	NTU
10/22/2014	R01D	COLOR, FIELD	None	
		CONDUCTANCE, SPECIFIC	682	UMHOS/CM
		DEPTH TO BOTTOM	101.88	FEET
		DEPTH TO WATER	45.15	FEET
		GROUNDWATER ELEVATION	729.53	FT AMSL
		EH, FIELD	-77.1	MV
		ODOR, FIELD	None	
		OXYGEN, DISSOLVED	2.06	MG/L
		PH, FIELD	7.85	SU
		TEMPERATURE	53.4	DEG F
		TURBIDITY, FIELD	1.94	NTU
10/22/2014	US01D	COLOR, FIELD	None	
		CONDUCTANCE, SPECIFIC	831	UMHOS/CM
		DEPTH TO BOTTOM	95.76	FEET
		DEPTH TO WATER	40.78	FEET
		GROUNDWATER ELEVATION	728.1	FT AMSL
		EH, FIELD	120.2	MV
		ODOR, FIELD	None	
		OXYGEN, DISSOLVED	1.76	MG/L
		PH, FIELD	7.72	SU
		TEMPERATURE	53.1	DEG F
		TURBIDITY, FIELD	1.37	NTU

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SAMPLE DATE	SAMPLE POINT	PARAMETER	RESULT	UNITS
10/22/2014	US02D	COLOR, FIELD	None	
		CONDUCTANCE, SPECIFIC	660	UMHOS/CM
		DEPTH TO BOTTOM	112.88	FEET
		DEPTH TO WATER	42.8	FEET
		GROUNDWATER ELEVATION	727.93	FT AMSL
		EH, FIELD	-180.6	MV
		ODOR, FIELD	None	
		OXYGEN, DISSOLVED	6.20	MG/L
		PH, FIELD	7.53	SU
		TEMPERATURE	52.9	DEG F
		TURBIDITY, FIELD	0.09	NTU
10/22/2014	US03D	COLOR, FIELD	None	
		CONDUCTANCE, SPECIFIC	1,635	UMHOS/CM
		DEPTH TO BOTTOM	83.29	FEET
		DEPTH TO WATER	41.21	FEET
		GROUNDWATER ELEVATION	728.51	FT AMSL
		EH, FIELD	-44.1	MV
		ODOR, FIELD	None	
		OXYGEN, DISSOLVED	0.26	MG/L
		PH, FIELD	7.38	SU
		TEMPERATURE	55.1	DEG F
		TURBIDITY, FIELD	1.26	NTU
10/22/2014	US04D	COLOR, FIELD	None	
		CONDUCTANCE, SPECIFIC	518	UMHOS/CM
		DEPTH TO BOTTOM	105.91	FEET
		DEPTH TO WATER	45.01	FEET
		GROUNDWATER ELEVATION	727.69	FT AMSL
		EH, FIELD	-75.3	MV
		ODOR, FIELD	None	
		OXYGEN, DISSOLVED	1.30	MG/L
		PH, FIELD	8.03	SU
		TEMPERATURE	54.1	DEG F
		TURBIDITY, FIELD	6.22	NTU

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SAMPLE DATE	SAMPLE POINT	PARAMETER	RESULT	UNITS
10/23/2014	US04S	COLOR, FIELD	None	
		CONDUCTANCE, SPECIFIC	1,524	UMHOS/CM
		DEPTH TO BOTTOM	25.53	FEET
		DEPTH TO WATER	10.9	FEET
		GROUNDWATER ELEVATION	767.77	FT AMSL
		EH, FIELD	-112.8	MV
		ODOR, FIELD	None	
		OXYGEN, DISSOLVED	1.97	MG/L
		PH, FIELD	7.24	SU
		TEMPERATURE	54.7	DEG F
		TURBIDITY, FIELD	2.09	NTU
10/23/2014	US05D	COLOR, FIELD	None	
		CONDUCTANCE, SPECIFIC	434	UMHOS/CM
		DEPTH TO BOTTOM	96.00	FEET
		DEPTH TO WATER	39.35	FEET
		GROUNDWATER ELEVATION	728.38	FT AMSL
		EH, FIELD	240.3	MV
		ODOR, FIELD	None	
		OXYGEN, DISSOLVED	0.44	MG/L
		PH, FIELD	8.03	SU
		TEMPERATURE	50.8	DEG F
		TURBIDITY, FIELD	1.79	NTU
10/22/2014	US06D	COLOR, FIELD	None	
		CONDUCTANCE, SPECIFIC	551	UMHOS/CM
		DEPTH TO BOTTOM	85.57	FEET
		DEPTH TO WATER	42.29	FEET
		GROUNDWATER ELEVATION	727.8	FT AMSL
		EH, FIELD	-182.1	MV
		ODOR, FIELD	None	
		OXYGEN, DISSOLVED	1.3	MG/L
		PH, FIELD	7.61	SU
		TEMPERATURE	52.7	DEG F
		TURBIDITY, FIELD	1.22	NTU

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SAMPLE DATE	SAMPLE POINT	PARAMETER	RESULT	UNITS
10/22/2014	US06S	COLOR, FIELD	None	
		CONDUCTANCE, SPECIFIC	1,017	UMHOS/CM
		DEPTH TO BOTTOM	43.30	FEET
		DEPTH TO WATER	6.78	FEET
		GROUNDWATER ELEVATION	763.12	FT AMSL
		EH, FIELD	-81	MV
		ODOR, FIELD	None	
		OXYGEN, DISSOLVED	1.3	MG/L
		PH, FIELD	7.32	SU
		TEMPERATURE	53.5	DEG F
		TURBIDITY, FIELD	0.83	NTU
10/21/2014	W03D	COLOR, FIELD	None	
		CONDUCTANCE, SPECIFIC	986	UMHOS/CM
		DEPTH TO BOTTOM	80.43	FEET
		DEPTH TO WATER	36.75	FEET
		GROUNDWATER ELEVATION	729.18	FT AMSL
		EH, FIELD	-123.5	MV
		ODOR, FIELD	None	
		OXYGEN, DISSOLVED	0.9	MG/L
		PH, FIELD	7.36	SU
		TEMPERATURE	50.7	DEG F
		TURBIDITY, FIELD	3.44	NTU
10/23/2014	W06S	COLOR, FIELD	None	
		CONDUCTANCE, SPECIFIC	3,997	UMHOS/CM
		DEPTH TO BOTTOM	17.20	FEET
		DEPTH TO WATER	4.2	FEET
		GROUNDWATER ELEVATION	763.21	FT AMSL
		EH, FIELD	99.7	MV
		ODOR, FIELD	None	
		OXYGEN, DISSOLVED	2.97	MG/L
		PH, FIELD	7.11	SU
		TEMPERATURE	53.7	DEG F
		TURBIDITY, FIELD	1.88	NTU

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SAMPLE DATE	SAMPLE POINT	PARAMETER	RESULT	UNITS
10/21/2014	W08D	COLOR, FIELD	None	
		CONDUCTANCE, SPECIFIC	889	UMHOS/CM
		DEPTH TO BOTTOM	96.10	FEET
		DEPTH TO WATER	39.41	FEET
		GROUNDWATER ELEVATION	728.73	FT AMSL
		EH, FIELD	-107.2	MV
		ODOR, FIELD	None	
		OXYGEN, DISSOLVED	1.90	MG/L
		PH, FIELD	7.16	SU
		TEMPERATURE	50.1	DEG F
		TURBIDITY, FIELD	2.56	NTU
10/22/2014	VW03	COLOR, FIELD	None	
		CONDUCTANCE, SPECIFIC	706	UMHOS/CM
		DEPTH TO BOTTOM		FEET
		DEPTH TO WATER		FEET
		GROUNDWATER ELEVATION		FT AMSL
		EH, FIELD	-91	MV
		ODOR, FIELD	None	
		OXYGEN, DISSOLVED	0.71	MG/L
		PH, FIELD	7.60	SU
		TEMPERATURE	53.1	DEG F
		TURBIDITY, FIELD	0.93	NTU
10/22/2014	SW01	COLOR, FIELD	None	
		CONDUCTANCE, SPECIFIC	960	UMHOS/CM
		DEPTH TO BOTTOM		FEET
		DEPTH TO WATER		FEET
		GROUNDWATER ELEVATION		FT AMSL
		EH, FIELD	24.4	MV
		ODOR, FIELD	None	
		OXYGEN, DISSOLVED	8.71	MG/L
		PH, FIELD	8.08	SU
		TEMPERATURE	56.2	DEG F
		TURBIDITY, FIELD	4.44	NTU

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SAMPLE DATE	SAMPLE POINT	PARAMETER	RESULT	UNITS
10/22/2014	SW02	COLOR, FIELD	None	
		CONDUCTANCE, SPECIFIC	922	UMHOS/CM
		DEPTH TO BOTTOM		FEET
		DEPTH TO WATER		FEET
		GROUNDWATER ELEVATION		FT AMSL
		EH, FIELD	20.6	MV
		ODOR, FIELD	None	
		OXYGEN, DISSOLVED	7.96	MG/L
		PH, FIELD	8.19	SU
		TEMPERATURE	55.7	DEG F
		TURBIDITY, FIELD	5.06	NTU

Abbreviations:
UMHOS/CM = micromhos per centimeter
FT AMSL = feet above mean sea level
MV = Millivolts
SU = standard unit
MG/L = milligrams per liter
DEG F = degrees Fahrenheit
NTU = nephelometric turbidity unit
NA = Not Applicable

Notes:
1. Groundwater elevations presented in this table were those measured at the time groundwater sample collection occurred.

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Appendix F
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Sample Date	Sample Point	Parameter	Result	Reporting Limit	Flags	UM
4/17/2014	R-01D	Fluoride, Dissolved	1.1	0.5		MG/L
4/17/2014	R-01D	Ammonia as N	0.8	0.1		MG/L AS N
4/17/2014	R-01D	Total Kjeldahl Nitrogen	0.87	0.15		MG/L AS N
4/17/2014	R-01D	Nitrate, Dissolved	0.02	0.02	U	MG/L AS N
4/17/2014	R-01D	Nitrite	0.02	0.02	U	MG/L AS N
4/17/2014	R-01D	Total Recoverable Phenolics	0.005	0.005	U	MG/L
4/17/2014	R-01D	Aldicarb	2.5	2.5	U	UG/L
4/17/2014	R-01D	Carbofuran	2.5	2.5	U	UG/L
4/17/2014	R-01D	Endothall	25	25	U	UG/L
4/17/2014	R-01D	Arsenic, Dissolved	10	10	U	UG/L
4/17/2014	R-01D	Barium, Dissolved	200	200	U	UG/L
4/17/2014	R-01D	Boron, Dissolved	296	100		UG/L
4/17/2014	R-01D	Cadmium, Dissolved	5	5	U	UG/L
4/17/2014	R-01D	Calcium, Dissolved	51300	5000		UG/L
4/17/2014	R-01D	Chromium, Dissolved	10	10	U	UG/L
4/17/2014	R-01D	Cobalt, Dissolved	10	10	U	UG/L
4/17/2014	R-01D	Copper, Dissolved	10	10	U	UG/L
4/17/2014	R-01D	Iron, Dissolved	652	100		UG/L
4/17/2014	R-01D	Lead, Dissolved	3	3	U	UG/L
4/17/2014	R-01D	Magnesium, Dissolved	35000	5000		UG/L
4/17/2014	R-01D	Manganese, Dissolved	12.3	5		UG/L
4/17/2014	R-01D	Nickel, Dissolved	10	10	U	UG/L
4/17/2014	R-01D	Silver, Dissolved	10	10	U	UG/L
4/17/2014	R-01D	Zinc, Dissolved	20	20	U	UG/L
4/17/2014	R-01D	Antimony, Dissolved	0.6	0.6	U	UG/L
4/17/2014	R-01D	Beryllium, Dissolved	0.4	0.4	U	UG/L
4/17/2014	R-01D	Selenium, Dissolved	5	5	U	UG/L
4/17/2014	R-01D	Thallium, Dissolved	0.2	0.2	U	UG/L
4/17/2014	R-01D	Mercury, Dissolved	0.2	0.2	U	UG/L
4/17/2014	R-01D	alpha-Chlordane	0.05	0.05	U	UG/L
4/17/2014	R-01D	Endrin	0.1	0.1	U	UG/L
4/17/2014	R-01D	gamma-BHC (Lindane)	0.05	0.05	U	UG/L
4/17/2014	R-01D	gamma-Chlordane	0.05	0.05	U	UG/L
4/17/2014	R-01D	Heptachlor	0.05	0.05	U	UG/L
4/17/2014	R-01D	Heptachlor epoxide	0.05	0.05	U	UG/L
4/17/2014	R-01D	Methoxychlor	0.5	0.5	U	UG/L
4/17/2014	R-01D	Toxaphene	5	5	U	UG/L
4/17/2014	R-01D	Aroclor 1016	0.47	0.47	U	UG/L
4/17/2014	R-01D	Aroclor 1221	0.47	0.47	U	UG/L
4/17/2014	R-01D	Aroclor 1232	0.47	0.47	U	UG/L
4/17/2014	R-01D	Aroclor 1242	0.47	0.47	U	UG/L
4/17/2014	R-01D	Aroclor 1248	0.47	0.47	U	UG/L
4/17/2014	R-01D	Aroclor 1254	0.47	0.47	U	UG/L
4/17/2014	R-01D	Aroclor 1260	0.47	0.47	U	UG/L
4/17/2014	R-01D	2,4,5-TP (Silvex)	2	2	U	UG/L
4/17/2014	R-01D	2,4-D	10	10	U	UG/L
4/17/2014	R-01D	Dalapon	1	1	U	UG/L
4/17/2014	R-01D	Dinoseb	1	1	U	UG/L
4/17/2014	R-01D	Picloram	1	1	U	UG/L
4/17/2014	R-01D	1,2-Dichlorobenzene	0.15	0.15	U	UG/L
4/17/2014	R-01D	1,4-Dichlorobenzene	0.1	0.1	U	UG/L

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Sample Date	Sample Point	Parameter	Result	Reporting Limit	Flags	UM
4/17/2014	R-01D	Alachlor	1	1	U	UG/L
4/17/2014	R-01D	Atrazine	3	3	U	UG/L
4/17/2014	R-01D	Benzo(a)pyrene	0.13	0.13	U	UG/L
4/17/2014	R-01D	Bis(2-ethylhexyl) phthalate	4.8	4.8	U	UG/L
4/17/2014	R-01D	Hexachlorocyclopentadiene	0.7	0.7	U	UG/L
4/17/2014	R-01D	Pentachlorophenol	0.34	0.34	U	UG/L
4/17/2014	R-01D	Simazine	4	4	U	UG/L
4/17/2014	R-01D	Dissolved Cyanide	0.01	0.01	U	MG/L
4/17/2014	R-01D	Chloride, Dissolved	34.1	1		MG/L
4/17/2014	R-01D	Sulfate	36.3	1.5		MG/L
4/17/2014	R-01D	Sulfate, Dissolved	37.6	1.5		MG/L
4/17/2014	R-01D	Nitrogen, Nitrate	0.02	0.02	U	MG/L AS N
4/17/2014	R-01D	1,1,1-Trichloroethane	2.1	2.1	U	UG/L
4/17/2014	R-01D	1,1,2-Trichloroethane	1.9	1.9	U	UG/L
4/17/2014	R-01D	1,1-Dichloroethene	2.5	2.5	U	UG/L
4/17/2014	R-01D	1,2,4-Trichlorobenzene	1	1	U	UG/L
4/17/2014	R-01D	1,2-Dibromo-3-Chloropropane	5	5	U	UG/L
4/17/2014	R-01D	1,2-Dibromoethane	2	2	U	UG/L
4/17/2014	R-01D	1,2-Dichloroethane	1	1	U	UG/L
4/17/2014	R-01D	1,2-Dichloropropane	1.7	1.7	U	UG/L
4/17/2014	R-01D	Benzene	1.6	1.6	U	UG/L
4/17/2014	R-01D	Carbon tetrachloride	2	2	U	UG/L
4/17/2014	R-01D	Chlorobenzene	1.6	1.6	U	UG/L
4/17/2014	R-01D	Chloroethane	2.5	2.5	U	UG/L
4/17/2014	R-01D	cis-1,2-Dichloroethene	1.8	1.8	U	UG/L
4/17/2014	R-01D	Ethylbenzene	1.6	1.6	U	UG/L
4/17/2014	R-01D	Methylene Chloride	1.3	1.3	U	UG/L
4/17/2014	R-01D	Styrene	1.7	1.7	U	UG/L
4/17/2014	R-01D	Tetrachloroethene	2.1	2.1	U	UG/L
4/17/2014	R-01D	Toluene	1.6	1.6	U	UG/L
4/17/2014	R-01D	trans-1,2-Dichloroethene	1.9	1.9	U	UG/L
4/17/2014	R-01D	Trichloroethene	1.9	1.9	U	UG/L
4/17/2014	R-01D	Vinyl chloride	2.3	2.3	U	UG/L
4/17/2014	R-01D	Xylenes, Total	3	3	U	UG/L
4/17/2014	R-01D	Ethane	15	15	U	UG/L
4/17/2014	R-01D	Ethene	13	13	U	UG/L
4/17/2014	R-01D	Methane	14	8		UG/L
4/17/2014	R-01D	Alkalinity, Total	306	10		MG/L
4/17/2014	R-01D	Calcium and Magnesium Hardness, Dissolved	272000	500		UG/L
4/17/2014	R-01D	Total Dissolved Solids Field Filtered	371	5		MG/L
4/17/2014	R-01D	Orthophosphate	0.02	0.02	U	MG/L AS P
4/17/2014	R-01D	Sulfide	1	1	U	MG/L
4/17/2014	R-01D	Biochemical Oxygen Demand	2	2	U	MG/L
4/17/2014	R-01D	Total Organic Carbon	1.8	1		MG/L
4/17/2014	US-01D	Fluoride, Dissolved	0.56	0.5		MG/L
4/17/2014	US-01D	Ammonia as N	0.86	0.1		MG/L AS N
4/17/2014	US-01D	Total Kjeldahl Nitrogen	0.87	0.15		MG/L AS N
4/17/2014	US-01D	Nitrate, Dissolved	0.02	0.02	U	MG/L AS N
4/17/2014	US-01D	Nitrite	0.02	0.02	U	MG/L AS N
4/17/2014	US-01D	Total Recoverable Phenolics	0.005	0.005	U	MG/L
4/17/2014	US-01D	Aldicarb	2.5	2.5	U *	UG/L

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Sample Date	Sample Point	Parameter	Result	Reporting Limit	Flags	UM
4/17/2014	US-01D	Carbofuran	2.5	2.5	U	UG/L
4/17/2014	US-01D	Endothall	25	25	U	UG/L
4/17/2014	US-01D	Arsenic, Dissolved	10	10	U	UG/L
4/17/2014	US-01D	Barium, Dissolved	200	200	U	UG/L
4/17/2014	US-01D	Boron, Dissolved	271	100		UG/L
4/17/2014	US-01D	Cadmium, Dissolved	5	5	U	UG/L
4/17/2014	US-01D	Calcium, Dissolved	60600	5000		UG/L
4/17/2014	US-01D	Chromium, Dissolved	10	10	U	UG/L
4/17/2014	US-01D	Cobalt, Dissolved	10	10	U	UG/L
4/17/2014	US-01D	Copper, Dissolved	10	10	U	UG/L
4/17/2014	US-01D	Iron, Dissolved	756	100		UG/L
4/17/2014	US-01D	Lead, Dissolved	3	3	U	UG/L
4/17/2014	US-01D	Magnesium, Dissolved	44900	5000		UG/L
4/17/2014	US-01D	Manganese, Dissolved	34.5	5		UG/L
4/17/2014	US-01D	Nickel, Dissolved	10	10	U	UG/L
4/17/2014	US-01D	Silver, Dissolved	10	10	U	UG/L
4/17/2014	US-01D	Zinc, Dissolved	20	20	U	UG/L
4/17/2014	US-01D	Antimony, Dissolved	0.6	0.6	U	UG/L
4/17/2014	US-01D	Beryllium, Dissolved	0.4	0.4	U	UG/L
4/17/2014	US-01D	Selenium, Dissolved	5	5	U	UG/L
4/17/2014	US-01D	Thallium, Dissolved	0.2	0.2	U	UG/L
4/17/2014	US-01D	Mercury, Dissolved	0.2	0.2	U	UG/L
4/17/2014	US-01D	alpha-Chlordane	0.05	0.05	U	UG/L
4/17/2014	US-01D	Endrin	0.1	0.1	U	UG/L
4/17/2014	US-01D	gamma-BHC (Lindane)	0.05	0.05	U	UG/L
4/17/2014	US-01D	gamma-Chlordane	0.05	0.05	U	UG/L
4/17/2014	US-01D	Heptachlor	0.05	0.05	U	UG/L
4/17/2014	US-01D	Heptachlor epoxide	0.05	0.05	U	UG/L
4/17/2014	US-01D	Methoxychlor	0.5	0.5	U	UG/L
4/17/2014	US-01D	Toxaphene	5	5	U	UG/L
4/17/2014	US-01D	Aroclor 1016	0.47	0.47	U	UG/L
4/17/2014	US-01D	Aroclor 1221	0.47	0.47	U	UG/L
4/17/2014	US-01D	Aroclor 1232	0.47	0.47	U	UG/L
4/17/2014	US-01D	Aroclor 1242	0.47	0.47	U	UG/L
4/17/2014	US-01D	Aroclor 1248	0.47	0.47	U	UG/L
4/17/2014	US-01D	Aroclor 1254	0.47	0.47	U	UG/L
4/17/2014	US-01D	Aroclor 1260	0.47	0.47	U	UG/L
4/17/2014	US-01D	2,4,5-TP (Silvex)	2	2	U	UG/L
4/17/2014	US-01D	2,4-D	10	10	U	UG/L
4/17/2014	US-01D	Dalapon	1	1	U	UG/L
4/17/2014	US-01D	Dinoseb	1	1	U	UG/L
4/17/2014	US-01D	Picloram	1	1	U	UG/L
4/17/2014	US-01D	1,2-Dichlorobenzene	0.15	0.15	U	UG/L
4/17/2014	US-01D	1,4-Dichlorobenzene	0.1	0.1	U	UG/L
4/17/2014	US-01D	Alachlor	1	1	U	UG/L
4/17/2014	US-01D	Atrazine	3	3	U	UG/L
4/17/2014	US-01D	Benzo(a)pyrene	0.12	0.12	U	UG/L
4/17/2014	US-01D	Bis(2-ethylhexyl) phthalate	4.8	4.8	U	UG/L
4/17/2014	US-01D	Hexachlorocyclopentadiene	0.7	0.7	U	UG/L
4/17/2014	US-01D	Pentachlorophenol	0.34	0.34	U	UG/L
4/17/2014	US-01D	Simazine	4	4	U	UG/L

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Sample Date	Sample Point	Parameter	Result	Reporting Limit	Flags	UM
4/17/2014	US-01D	Dissolved Cyanide	0.01	0.01	U	MG/L
4/17/2014	US-01D	Chloride, Dissolved	30.7	1		MG/L
4/17/2014	US-01D	Sulfate	126	7.5		MG/L
4/17/2014	US-01D	Sulfate, Dissolved	125	7.5		MG/L
4/17/2014	US-01D	Nitrogen, Nitrate	0.02	0.02	U	MG/L AS N
4/17/2014	US-01D	1,1,1-Trichloroethane	2.1	2.1	U	UG/L
4/17/2014	US-01D	1,1,2-Trichloroethane	1.9	1.9	U	UG/L
4/17/2014	US-01D	1,1-Dichloroethene	2.5	2.5	U	UG/L
4/17/2014	US-01D	1,2,4-Trichlorobenzene	1	1	U	UG/L
4/17/2014	US-01D	1,2-Dibromo-3-Chloropropane	5	5	U	UG/L
4/17/2014	US-01D	1,2-Dibromoethane	2	2	U	UG/L
4/17/2014	US-01D	1,2-Dichloroethane	1	1	U	UG/L
4/17/2014	US-01D	1,2-Dichloropropane	1.7	1.7	U	UG/L
4/17/2014	US-01D	Benzene	1.6	1.6	U	UG/L
4/17/2014	US-01D	Carbon tetrachloride	2	2	U	UG/L
4/17/2014	US-01D	Chlorobenzene	1.6	1.6	U	UG/L
4/17/2014	US-01D	Chloroethane	2.5	2.5	U	UG/L
4/17/2014	US-01D	cis-1,2-Dichloroethene	1.8	1.8	U	UG/L
4/17/2014	US-01D	Ethylbenzene	1.6	1.6	U	UG/L
4/17/2014	US-01D	Methylene Chloride	1.3	1.3	U	UG/L
4/17/2014	US-01D	Styrene	1.7	1.7	U	UG/L
4/17/2014	US-01D	Tetrachloroethene	2.1	2.1	U	UG/L
4/17/2014	US-01D	Toluene	1.6	1.6	U	UG/L
4/17/2014	US-01D	trans-1,2-Dichloroethene	1.9	1.9	U	UG/L
4/17/2014	US-01D	Trichloroethene	1.9	1.9	U	UG/L
4/17/2014	US-01D	Vinyl chloride	2.3	2.3	U	UG/L
4/17/2014	US-01D	Xylenes, Total	3	3	U	UG/L
4/17/2014	US-01D	Ethane	15	15	U	UG/L
4/17/2014	US-01D	Ethene	13	13	U	UG/L
4/17/2014	US-01D	Methane	11	8		UG/L
4/17/2014	US-01D	Alkalinity, Total	288	10		MG/L
4/17/2014	US-01D	Calcium and Magnesium Hardness, Dissolved	336000	500		UG/L
4/17/2014	US-01D	Total Dissolved Solids Field Filtered	511	5		MG/L
4/17/2014	US-01D	Orthophosphate	0.053	0.02		MG/L AS P
4/17/2014	US-01D	Sulfide	1	1	U	MG/L
4/17/2014	US-01D	Biochemical Oxygen Demand	2	2	U	MG/L
4/17/2014	US-01D	Total Organic Carbon	2.6	1		MG/L
4/17/2014	US-02D	Fluoride, Dissolved	0.72	0.5		MG/L
4/17/2014	US-02D	Ammonia as N	1.3	0.1		MG/L AS N
4/17/2014	US-02D	Total Kjeldahl Nitrogen	1.4	0.15		MG/L AS N
4/17/2014	US-02D	Nitrate, Dissolved	0.031	0.02		MG/L AS N
4/17/2014	US-02D	Nitrite	0.02	0.02	U	MG/L AS N
4/17/2014	US-02D	Total Recoverable Phenolics	0.005	0.005	U	MG/L
4/17/2014	US-02D	Aldicarb	2.5	2.5	U *	UG/L
4/17/2014	US-02D	Carbofuran	2.5	2.5	U	UG/L
4/17/2014	US-02D	Endothall	25	25	U	UG/L
4/17/2014	US-02D	Arsenic, Dissolved	10	10	U	UG/L
4/17/2014	US-02D	Barium, Dissolved	200	200	U	UG/L
4/17/2014	US-02D	Boron, Dissolved	311	100		UG/L
4/17/2014	US-02D	Cadmium, Dissolved	5	5	U	UG/L
4/17/2014	US-02D	Calcium, Dissolved	52600	5000		UG/L

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Sample Date	Sample Point	Parameter	Result	Reporting Limit	Flags	UM
4/17/2014	US-02D	Chromium, Dissolved	10	10	U	UG/L
4/17/2014	US-02D	Cobalt, Dissolved	10	10	U	UG/L
4/17/2014	US-02D	Copper, Dissolved	10	10	U	UG/L
4/17/2014	US-02D	Iron, Dissolved	545	100		UG/L
4/17/2014	US-02D	Lead, Dissolved	3	3	U	UG/L
4/17/2014	US-02D	Magnesium, Dissolved	36000	5000		UG/L
4/17/2014	US-02D	Manganese, Dissolved	45	5		UG/L
4/17/2014	US-02D	Nickel, Dissolved	10	10	U	UG/L
4/17/2014	US-02D	Silver, Dissolved	10	10	U	UG/L
4/17/2014	US-02D	Zinc, Dissolved	20	20	U	UG/L
4/17/2014	US-02D	Antimony, Dissolved	0.6	0.6	U	UG/L
4/17/2014	US-02D	Beryllium, Dissolved	0.4	0.4	U	UG/L
4/17/2014	US-02D	Selenium, Dissolved	5	5	U	UG/L
4/17/2014	US-02D	Thallium, Dissolved	0.2	0.2	U	UG/L
4/17/2014	US-02D	Mercury, Dissolved	0.2	0.2	U	UG/L
4/17/2014	US-02D	alpha-Chlordane	0.05	0.05	U	UG/L
4/17/2014	US-02D	Endrin	0.1	0.1	U	UG/L
4/17/2014	US-02D	gamma-BHC (Lindane)	0.05	0.05	U	UG/L
4/17/2014	US-02D	gamma-Chlordane	0.05	0.05	U	UG/L
4/17/2014	US-02D	Heptachlor	0.05	0.05	U	UG/L
4/17/2014	US-02D	Heptachlor epoxide	0.05	0.05	U	UG/L
4/17/2014	US-02D	Methoxychlor	0.5	0.5	U	UG/L
4/17/2014	US-02D	Toxaphene	5	5	U	UG/L
4/17/2014	US-02D	Aroclor 1016	0.47	0.47	U	UG/L
4/17/2014	US-02D	Aroclor 1221	0.47	0.47	U	UG/L
4/17/2014	US-02D	Aroclor 1232	0.47	0.47	U	UG/L
4/17/2014	US-02D	Aroclor 1242	0.47	0.47	U	UG/L
4/17/2014	US-02D	Aroclor 1248	0.47	0.47	U	UG/L
4/17/2014	US-02D	Aroclor 1254	0.47	0.47	U	UG/L
4/17/2014	US-02D	Aroclor 1260	0.47	0.47	U	UG/L
4/17/2014	US-02D	2,4,5-TP (Silvex)	2	2	U	UG/L
4/17/2014	US-02D	2,4-D	10	10	U	UG/L
4/17/2014	US-02D	Dalapon	1	1	U	UG/L
4/17/2014	US-02D	Dinoseb	1	1	U	UG/L
4/17/2014	US-02D	Picloram	1	1	U	UG/L
4/17/2014	US-02D	1,2-Dichlorobenzene	0.15	0.15	U	UG/L
4/17/2014	US-02D	1,4-Dichlorobenzene	0.1	0.1	U	UG/L
4/17/2014	US-02D	Alachlor	1	1	U	UG/L
4/17/2014	US-02D	Atrazine	3	3	U	UG/L
4/17/2014	US-02D	Benzo(a)pyrene	0.12	0.12	U	UG/L
4/17/2014	US-02D	Bis(2-ethylhexyl) phthalate	4.8	4.8	U	UG/L
4/17/2014	US-02D	Hexachlorocyclopentadiene	0.7	0.7	U	UG/L
4/17/2014	US-02D	Pentachlorophenol	0.34	0.34	U	UG/L
4/17/2014	US-02D	Simazine	4	4	U	UG/L
4/17/2014	US-02D	Dissolved Cyanide	0.01	0.01	U	MG/L
4/17/2014	US-02D	Chloride, Dissolved	20.8	1		MG/L
4/17/2014	US-02D	Sulfate	47.2	3		MG/L
4/17/2014	US-02D	Sulfate, Dissolved	45.9	3		MG/L
4/17/2014	US-02D	Nitrogen, Nitrate	0.033	0.02		MG/L AS N
4/17/2014	US-02D	1,1,1-Trichloroethane	2.1	2.1	U	UG/L
4/17/2014	US-02D	1,1,2-Trichloroethane	1.9	1.9	U	UG/L

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Sample Date	Sample Point	Parameter	Result	Reporting Limit	Flags	UM
4/17/2014	US-02D	1,1-Dichloroethene	2.5	2.5	U	UG/L
4/17/2014	US-02D	1,2,4-Trichlorobenzene	1	1	U	UG/L
4/17/2014	US-02D	1,2-Dibromo-3-Chloropropane	5	5	U	UG/L
4/17/2014	US-02D	1,2-Dibromoethane	2	2	U	UG/L
4/17/2014	US-02D	1,2-Dichloroethane	1	1	U	UG/L
4/17/2014	US-02D	1,2-Dichloropropane	1.7	1.7	U	UG/L
4/17/2014	US-02D	Benzene	1.6	1.6	U	UG/L
4/17/2014	US-02D	Carbon tetrachloride	2	2	U	UG/L
4/17/2014	US-02D	Chlorobenzene	1.6	1.6	U	UG/L
4/17/2014	US-02D	Chloroethane	2.5	2.5	U	UG/L
4/17/2014	US-02D	cis-1,2-Dichloroethene	1.8	1.8	U	UG/L
4/17/2014	US-02D	Ethylbenzene	1.6	1.6	U	UG/L
4/17/2014	US-02D	Methylene Chloride	1.3	1.3	U	UG/L
4/17/2014	US-02D	Styrene	1.7	1.7	U	UG/L
4/17/2014	US-02D	Tetrachloroethene	2.1	2.1	U	UG/L
4/17/2014	US-02D	Toluene	1.6	1.6	U	UG/L
4/17/2014	US-02D	trans-1,2-Dichloroethene	1.9	1.9	U	UG/L
4/17/2014	US-02D	Trichloroethene	1.9	1.9	U	UG/L
4/17/2014	US-02D	Vinyl chloride	2.3	2.3	U	UG/L
4/17/2014	US-02D	Xylenes, Total	3	3	U	UG/L
4/17/2014	US-02D	Ethane	15	15	U	UG/L
4/17/2014	US-02D	Ethene	13	13	U	UG/L
4/17/2014	US-02D	Methane	22	8		UG/L
4/17/2014	US-02D	Alkalinity, Total	311	10		MG/L
4/17/2014	US-02D	Calcium and Magnesium Hardness, Dissolved	279000	500		UG/L
4/17/2014	US-02D	Total Dissolved Solids Field Filtered	385	5		MG/L
4/17/2014	US-02D	Orthophosphate	0.52	0.02		MG/L AS P
4/17/2014	US-02D	Sulfide	1	1	U	MG/L
4/17/2014	US-02D	Biochemical Oxygen Demand	2	2	U	MG/L
4/17/2014	US-02D	Total Organic Carbon	1.4	1		MG/L
4/18/2014	US-03D	Fluoride, Dissolved	0.53	0.5		MG/L
4/18/2014	US-03D	Ammonia as N	0.41	0.1		MG/L AS N
4/18/2014	US-03D	Total Kjeldahl Nitrogen	0.57	0.15		MG/L AS N
4/18/2014	US-03D	Nitrate, Dissolved	0.02	0.02	U	MG/L AS N
4/18/2014	US-03D	Nitrite	0.02	0.02	U	MG/L AS N
4/18/2014	US-03D	Total Recoverable Phenolics	0.005	0.005	U	MG/L
4/18/2014	US-03D	Aldicarb	2.5	2.5	U	UG/L
4/18/2014	US-03D	Carbofuran	2.5	2.5	U	UG/L
4/18/2014	US-03D	Endothall	25	25	U	UG/L
4/18/2014	US-03D	Arsenic, Dissolved	10	10	U	UG/L
4/18/2014	US-03D	Barium, Dissolved	200	200	U	UG/L
4/18/2014	US-03D	Boron, Dissolved	102	100		UG/L
4/18/2014	US-03D	Cadmium, Dissolved	5	5	U	UG/L
4/18/2014	US-03D	Calcium, Dissolved	107000	5000		UG/L
4/18/2014	US-03D	Chromium, Dissolved	10	10	U	UG/L
4/18/2014	US-03D	Cobalt, Dissolved	10	10	U	UG/L
4/18/2014	US-03D	Copper, Dissolved	10	10	U	UG/L
4/18/2014	US-03D	Iron, Dissolved	3010	100		UG/L
4/18/2014	US-03D	Lead, Dissolved	3	3	U	UG/L
4/18/2014	US-03D	Magnesium, Dissolved	55200	5000		UG/L
4/18/2014	US-03D	Manganese, Dissolved	36.9	5		UG/L

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Sample Date	Sample Point	Parameter	Result	Reporting Limit	Flags	UM
4/18/2014	US-03D	Nickel, Dissolved	10	10	U	UG/L
4/18/2014	US-03D	Silver, Dissolved	10	10	U	UG/L
4/18/2014	US-03D	Zinc, Dissolved	20	20	U	UG/L
4/18/2014	US-03D	Antimony, Dissolved	0.6	0.6	U	UG/L
4/18/2014	US-03D	Beryllium, Dissolved	0.4	0.4	U	UG/L
4/18/2014	US-03D	Selenium, Dissolved	5	5	U	UG/L
4/18/2014	US-03D	Thallium, Dissolved	0.2	0.2	U	UG/L
4/18/2014	US-03D	Mercury, Dissolved	0.2	0.2	U	UG/L
4/18/2014	US-03D	alpha-Chlordane	0.05	0.05	U	UG/L
4/18/2014	US-03D	Endrin	0.1	0.1	U	UG/L
4/18/2014	US-03D	gamma-BHC (Lindane)	0.05	0.05	U	UG/L
4/18/2014	US-03D	gamma-Chlordane	0.05	0.05	U	UG/L
4/18/2014	US-03D	Heptachlor	0.05	0.05	U	UG/L
4/18/2014	US-03D	Heptachlor epoxide	0.05	0.05	U	UG/L
4/18/2014	US-03D	Methoxychlor	0.5	0.5	U	UG/L
4/18/2014	US-03D	Toxaphene	5	5	U	UG/L
4/18/2014	US-03D	Aroclor 1016	0.47	0.47	U	UG/L
4/18/2014	US-03D	Aroclor 1221	0.47	0.47	U	UG/L
4/18/2014	US-03D	Aroclor 1232	0.47	0.47	U	UG/L
4/18/2014	US-03D	Aroclor 1242	0.47	0.47	U	UG/L
4/18/2014	US-03D	Aroclor 1248	0.47	0.47	U	UG/L
4/18/2014	US-03D	Aroclor 1254	0.47	0.47	U	UG/L
4/18/2014	US-03D	Aroclor 1260	0.47	0.47	U	UG/L
4/18/2014	US-03D	2,4,5-TP (Silvex)	2	2	U	UG/L
4/18/2014	US-03D	2,4-D	10	10	U	UG/L
4/18/2014	US-03D	Dalapon	1	1	U	UG/L
4/18/2014	US-03D	Dinoseb	1	1	U	UG/L
4/18/2014	US-03D	Picloram	1	1	U	UG/L
4/18/2014	US-03D	1,2-Dichlorobenzene	0.15	0.15	U	UG/L
4/18/2014	US-03D	1,4-Dichlorobenzene	0.1	0.1	U	UG/L
4/18/2014	US-03D	Alachlor	1	1	U	UG/L
4/18/2014	US-03D	Atrazine	3	3	U *	UG/L
4/18/2014	US-03D	Benzo(a)pyrene	0.13	0.13	U	UG/L
4/18/2014	US-03D	Bis(2-ethylhexyl) phthalate	4.8	4.8	U	UG/L
4/18/2014	US-03D	Hexachlorocyclopentadiene	0.7	0.7	U	UG/L
4/18/2014	US-03D	Pentachlorophenol	0.34	0.34	U	UG/L
4/18/2014	US-03D	Simazine	4	4	U	UG/L
4/18/2014	US-03D	Dissolved Cyanide	0.01	0.01	U	MG/L
4/18/2014	US-03D	Chloride, Dissolved	256	3.4		MG/L
4/18/2014	US-03D	Sulfate	60.3	3		MG/L
4/18/2014	US-03D	Sulfate, Dissolved	51.5	7.5		MG/L
4/18/2014	US-03D	Nitrogen, Nitrate	0.02	0.02	U	MG/L AS N
4/18/2014	US-03D	1,1,1-Trichloroethane	4.2	4.2	U	UG/L
4/18/2014	US-03D	1,1,2-Trichloroethane	3.8	3.8	U	UG/L
4/18/2014	US-03D	1,1-Dichloroethene	5	5	U	UG/L
4/18/2014	US-03D	1,2,4-Trichlorobenzene	1.1	1.1	U	UG/L
4/18/2014	US-03D	1,2-Dibromo-3-Chloropropane	10	10	U	UG/L
4/18/2014	US-03D	1,2-Dibromoethane	4	4	U	UG/L
4/18/2014	US-03D	1,2-Dichloroethane	1.7	1.7	U	UG/L
4/18/2014	US-03D	1,2-Dichloropropane	3.4	3.4	U	UG/L
4/18/2014	US-03D	Benzene	3.2	3.2	U	UG/L

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Sample Date	Sample Point	Parameter	Result	Reporting Limit	Flags	UM
4/18/2014	US-03D	Carbon tetrachloride	4	4	U	UG/L
4/18/2014	US-03D	Chlorobenzene	3.2	3.2	U	UG/L
4/18/2014	US-03D	Chloroethane	5	5	U	UG/L
4/18/2014	US-03D	cis-1,2-Dichloroethene	240	3.6		UG/L
4/18/2014	US-03D	Ethylbenzene	3.2	3.2	U	UG/L
4/18/2014	US-03D	Methylene Chloride	2.6	2.6	U	UG/L
4/18/2014	US-03D	Styrene	3.4	3.4	U	UG/L
4/18/2014	US-03D	Tetrachloroethene	4.2	4.2	U	UG/L
4/18/2014	US-03D	Toluene	3.2	3.2	U	UG/L
4/18/2014	US-03D	trans-1,2-Dichloroethene	45	3.8		UG/L
4/18/2014	US-03D	Trichloroethene	3.8	3.8	U	UG/L
4/18/2014	US-03D	Vinyl chloride	35	4.6		UG/L
4/18/2014	US-03D	Xylenes, Total	3	3	U	UG/L
4/18/2014	US-03D	Ethane	15	15	U	UG/L
4/18/2014	US-03D	Ethene	13	13	U	UG/L
4/18/2014	US-03D	Methane	32	8		UG/L
4/18/2014	US-03D	Alkalinity, Total	404	10		MG/L
4/18/2014	US-03D	Calcium and Magnesium Hardness, Dissolved	494000	500		UG/L
4/18/2014	US-03D	Total Dissolved Solids Field Filtered	861	5		MG/L
4/18/2014	US-03D	Orthophosphate	0.072	0.02		MG/L AS P
4/18/2014	US-03D	Sulfide	1	1	U	MG/L
4/18/2014	US-03D	Biochemical Oxygen Demand	2	2	U *	MG/L
4/18/2014	US-03D	Total Organic Carbon	1.9	1		MG/L
4/18/2014	US-04D	Fluoride, Dissolved	0.8	0.5		MG/L
4/18/2014	US-04D	Ammonia as N	0.73	0.1		MG/L AS N
4/18/2014	US-04D	Total Kjeldahl Nitrogen	0.86	0.15		MG/L AS N
4/18/2014	US-04D	Nitrate, Dissolved	0.02	0.02	U	MG/L AS N
4/18/2014	US-04D	Nitrite	0.02	0.02	U	MG/L AS N
4/18/2014	US-04D	Total Recoverable Phenolics	0.005	0.005	U	MG/L
4/18/2014	US-04D	Aldicarb	2.5	2.5	U	UG/L
4/18/2014	US-04D	Carbofuran	2.5	2.5	U	UG/L
4/18/2014	US-04D	Endothall	25	25	U	UG/L
4/18/2014	US-04D	Arsenic, Dissolved	10	10	U	UG/L
4/18/2014	US-04D	Barium, Dissolved	200	200	U	UG/L
4/18/2014	US-04D	Boron, Dissolved	389	100		UG/L
4/18/2014	US-04D	Cadmium, Dissolved	5	5	U	UG/L
4/18/2014	US-04D	Calcium, Dissolved	31800	5000		UG/L
4/18/2014	US-04D	Chromium, Dissolved	10	10	U	UG/L
4/18/2014	US-04D	Cobalt, Dissolved	10	10	U	UG/L
4/18/2014	US-04D	Copper, Dissolved	10	10	U	UG/L
4/18/2014	US-04D	Iron, Dissolved	100	100	U	UG/L
4/18/2014	US-04D	Lead, Dissolved	3	3	U	UG/L
4/18/2014	US-04D	Magnesium, Dissolved	22000	5000		UG/L
4/18/2014	US-04D	Manganese, Dissolved	12.4	5		UG/L
4/18/2014	US-04D	Nickel, Dissolved	10	10	U	UG/L
4/18/2014	US-04D	Silver, Dissolved	10	10	U	UG/L
4/18/2014	US-04D	Zinc, Dissolved	20	20	U	UG/L
4/18/2014	US-04D	Antimony, Dissolved	0.6	0.6	U	UG/L
4/18/2014	US-04D	Beryllium, Dissolved	0.4	0.4	U ^	UG/L
4/18/2014	US-04D	Selenium, Dissolved	5	5	U	UG/L
4/18/2014	US-04D	Thallium, Dissolved	0.2	0.2	U	UG/L

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Sample Date	Sample Point	Parameter	Result	Reporting Limit	Flags	UM
4/18/2014	US-04D	Mercury, Dissolved	0.2	0.2	U	UG/L
4/18/2014	US-04D	alpha-Chlordane	0.05	0.05	U	UG/L
4/18/2014	US-04D	Endrin	0.1	0.1	U	UG/L
4/18/2014	US-04D	gamma-BHC (Lindane)	0.05	0.05	U	UG/L
4/18/2014	US-04D	gamma-Chlordane	0.05	0.05	U	UG/L
4/18/2014	US-04D	Heptachlor	0.05	0.05	U	UG/L
4/18/2014	US-04D	Heptachlor epoxide	0.05	0.05	U	UG/L
4/18/2014	US-04D	Methoxychlor	0.5	0.5	U	UG/L
4/18/2014	US-04D	Toxaphene	5	5	U	UG/L
4/18/2014	US-04D	Aroclor 1016	0.47	0.47	U	UG/L
4/18/2014	US-04D	Aroclor 1221	0.47	0.47	U	UG/L
4/18/2014	US-04D	Aroclor 1232	0.47	0.47	U	UG/L
4/18/2014	US-04D	Aroclor 1242	0.47	0.47	U	UG/L
4/18/2014	US-04D	Aroclor 1248	0.47	0.47	U	UG/L
4/18/2014	US-04D	Aroclor 1254	0.47	0.47	U	UG/L
4/18/2014	US-04D	Aroclor 1260	0.47	0.47	U	UG/L
4/18/2014	US-04D	2,4,5-TP (Silvex)	2	2	U	UG/L
4/18/2014	US-04D	2,4-D	10	10	U	UG/L
4/18/2014	US-04D	Dalapon	1	1	U	UG/L
4/18/2014	US-04D	Dinoseb	1	1	U	UG/L
4/18/2014	US-04D	Picloram	1	1	U	UG/L
4/18/2014	US-04D	1,2-Dichlorobenzene	0.15	0.15	U	UG/L
4/18/2014	US-04D	1,4-Dichlorobenzene	0.1	0.1	U	UG/L
4/18/2014	US-04D	Alachlor	1	1	U	UG/L
4/18/2014	US-04D	Atrazine	3	3	U *	UG/L
4/18/2014	US-04D	Benzo(a)pyrene	0.13	0.13	U	UG/L
4/18/2014	US-04D	Bis(2-ethylhexyl) phthalate	4.8	4.8	U	UG/L
4/18/2014	US-04D	Hexachlorocyclopentadiene	0.7	0.7	U	UG/L
4/18/2014	US-04D	Pentachlorophenol	0.34	0.34	U	UG/L
4/18/2014	US-04D	Simazine	4	4	U	UG/L
4/18/2014	US-04D	Dissolved Cyanide	0.01	0.01	U	MG/L
4/18/2014	US-04D	Chloride, Dissolved	10.8	1		MG/L
4/18/2014	US-04D	Sulfate	56.1	3		MG/L
4/18/2014	US-04D	Sulfate, Dissolved	53.3	3		MG/L
4/18/2014	US-04D	Nitrogen, Nitrate	0.02	0.02	U	MG/L AS N
4/18/2014	US-04D	1,1,1-Trichloroethane	2.1	2.1	U	UG/L
4/18/2014	US-04D	1,1,2-Trichloroethane	1.9	1.9	U	UG/L
4/18/2014	US-04D	1,1-Dichloroethene	2.5	2.5	U	UG/L
4/18/2014	US-04D	1,2,4-Trichlorobenzene	1	1	U	UG/L
4/18/2014	US-04D	1,2-Dibromo-3-Chloropropane	5	5	U	UG/L
4/18/2014	US-04D	1,2-Dibromoethane	2	2	U	UG/L
4/18/2014	US-04D	1,2-Dichloroethane	1	1	U	UG/L
4/18/2014	US-04D	1,2-Dichloropropane	1.7	1.7	U	UG/L
4/18/2014	US-04D	Benzene	1.6	1.6	U	UG/L
4/18/2014	US-04D	Carbon tetrachloride	2	2	U	UG/L
4/18/2014	US-04D	Chlorobenzene	1.6	1.6	U	UG/L
4/18/2014	US-04D	Chloroethane	2.5	2.5	U	UG/L
4/18/2014	US-04D	cis-1,2-Dichloroethene	1.8	1.8	U	UG/L
4/18/2014	US-04D	Ethylbenzene	1.6	1.6	U	UG/L
4/18/2014	US-04D	Methylene Chloride	1.3	1.3	U	UG/L
4/18/2014	US-04D	Styrene	1.7	1.7	U	UG/L

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Sample Date	Sample Point	Parameter	Result	Reporting Limit	Flags	UM
4/18/2014	US-04D	Tetrachloroethene	2.1	2.1	U	UG/L
4/18/2014	US-04D	Toluene	1.6	1.6	U	UG/L
4/18/2014	US-04D	trans-1,2-Dichloroethene	1.9	1.9	U	UG/L
4/18/2014	US-04D	Trichloroethene	1.9	1.9	U	UG/L
4/18/2014	US-04D	Vinyl chloride	2.3	2.3	U	UG/L
4/18/2014	US-04D	Xylenes, Total	3	3	U	UG/L
4/18/2014	US-04D	Ethane	15	15	U	UG/L
4/18/2014	US-04D	Ethene	13	13	U	UG/L
4/18/2014	US-04D	Methane	8	8	U	UG/L
4/18/2014	US-04D	Alkalinity, Total	222	10		MG/L
4/18/2014	US-04D	Calcium and Magnesium Hardness, Dissolved	170000	500		UG/L
4/18/2014	US-04D	Total Dissolved Solids Field Filtered	289	5		MG/L
4/18/2014	US-04D	Orthophosphate	0.78	0.02		MG/L AS P
4/18/2014	US-04D	Sulfide	1	1	U	MG/L
4/18/2014	US-04D	Biochemical Oxygen Demand	2	2	U *	MG/L
4/18/2014	US-04D	Total Organic Carbon	2.3	1		MG/L
4/17/2014	US-05D	Fluoride, Dissolved	0.5	0.5	U	MG/L
4/17/2014	US-05D	Ammonia as N	0.26	0.1		MG/L AS N
4/17/2014	US-05D	Total Kjeldahl Nitrogen	0.34	0.15		MG/L AS N
4/17/2014	US-05D	Nitrate, Dissolved	0.02	0.02	U	MG/L AS N
4/17/2014	US-05D	Nitrite	0.02	0.02	U	MG/L AS N
4/17/2014	US-05D	Total Recoverable Phenolics	0.005	0.005	U	MG/L
4/17/2014	US-05D	Aldicarb	2.5	2.5	U *	UG/L
4/17/2014	US-05D	Carbofuran	2.5	2.5	U	UG/L
4/17/2014	US-05D	Endothall	25	25	U	UG/L
4/17/2014	US-05D	Arsenic, Dissolved	10	10	U	UG/L
4/17/2014	US-05D	Barium, Dissolved	200	200	U	UG/L
4/17/2014	US-05D	Boron, Dissolved	520	100		UG/L
4/17/2014	US-05D	Cadmium, Dissolved	5	5	U	UG/L
4/17/2014	US-05D	Calcium, Dissolved	22400	5000		UG/L
4/17/2014	US-05D	Chromium, Dissolved	10	10	U	UG/L
4/17/2014	US-05D	Cobalt, Dissolved	10	10	U	UG/L
4/17/2014	US-05D	Copper, Dissolved	10	10	U	UG/L
4/17/2014	US-05D	Iron, Dissolved	100	100	U	UG/L
4/17/2014	US-05D	Lead, Dissolved	3	3	U	UG/L
4/17/2014	US-05D	Magnesium, Dissolved	18000	5000		UG/L
4/17/2014	US-05D	Manganese, Dissolved	6.9	5		UG/L
4/17/2014	US-05D	Nickel, Dissolved	10	10	U	UG/L
4/17/2014	US-05D	Silver, Dissolved	10	10	U	UG/L
4/17/2014	US-05D	Zinc, Dissolved	20	20	U	UG/L
4/17/2014	US-05D	Antimony, Dissolved	0.6	0.6	U	UG/L
4/17/2014	US-05D	Beryllium, Dissolved	0.4	0.4	U	UG/L
4/17/2014	US-05D	Selenium, Dissolved	5	5	U	UG/L
4/17/2014	US-05D	Thallium, Dissolved	0.2	0.2	U	UG/L
4/17/2014	US-05D	Mercury, Dissolved	0.2	0.2	U	UG/L
4/17/2014	US-05D	alpha-Chlordane	0.05	0.05	U	UG/L
4/17/2014	US-05D	Endrin	0.1	0.1	U	UG/L
4/17/2014	US-05D	gamma-BHC (Lindane)	0.05	0.05	U	UG/L
4/17/2014	US-05D	gamma-Chlordane	0.05	0.05	U	UG/L
4/17/2014	US-05D	Heptachlor	0.05	0.05	U	UG/L
4/17/2014	US-05D	Heptachlor epoxide	0.05	0.05	U	UG/L

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Sample Date	Sample Point	Parameter	Result	Reporting Limit	Flags	UM
4/17/2014	US-05D	Methoxychlor	0.5	0.5	U	UG/L
4/17/2014	US-05D	Toxaphene	5	5	U	UG/L
4/17/2014	US-05D	Aroclor 1016	0.47	0.47	U	UG/L
4/17/2014	US-05D	Aroclor 1221	0.47	0.47	U	UG/L
4/17/2014	US-05D	Aroclor 1232	0.47	0.47	U	UG/L
4/17/2014	US-05D	Aroclor 1242	0.47	0.47	U	UG/L
4/17/2014	US-05D	Aroclor 1248	0.47	0.47	U	UG/L
4/17/2014	US-05D	Aroclor 1254	0.47	0.47	U	UG/L
4/17/2014	US-05D	Aroclor 1260	0.47	0.47	U	UG/L
4/17/2014	US-05D	2,4,5-TP (Silvex)	2	2	U	UG/L
4/17/2014	US-05D	2,4-D	10	10	U	UG/L
4/17/2014	US-05D	Dalapon	1	1	U	UG/L
4/17/2014	US-05D	Dinoseb	1	1	U	UG/L
4/17/2014	US-05D	Picloram	1	1	U	UG/L
4/17/2014	US-05D	1,2-Dichlorobenzene	0.15	0.15	U	UG/L
4/17/2014	US-05D	1,4-Dichlorobenzene	0.1	0.1	U	UG/L
4/17/2014	US-05D	Alachlor	1	1	U	UG/L
4/17/2014	US-05D	Atrazine	3	3	U	UG/L
4/17/2014	US-05D	Benzo(a)pyrene	0.13	0.13	U	UG/L
4/17/2014	US-05D	Bis(2-ethylhexyl) phthalate	4.8	4.8	U	UG/L
4/17/2014	US-05D	Hexachlorocyclopentadiene	0.7	0.7	U	UG/L
4/17/2014	US-05D	Pentachlorophenol	0.34	0.34	U	UG/L
4/17/2014	US-05D	Simazine	4	4	U	UG/L
4/17/2014	US-05D	Dissolved Cyanide	0.01	0.01	U	MG/L
4/17/2014	US-05D	Chloride, Dissolved	2.1	1		MG/L
4/17/2014	US-05D	Sulfate	70.3	3		MG/L
4/17/2014	US-05D	Sulfate, Dissolved	67.9	3		MG/L
4/17/2014	US-05D	Nitrogen, Nitrate	0.02	0.02	U	MG/L AS N
4/17/2014	US-05D	1,1,1-Trichloroethane	2.1	2.1	U	UG/L
4/17/2014	US-05D	1,1,2-Trichloroethane	1.9	1.9	U	UG/L
4/17/2014	US-05D	1,1-Dichloroethene	2.5	2.5	U	UG/L
4/17/2014	US-05D	1,2,4-Trichlorobenzene	1	1	U	UG/L
4/17/2014	US-05D	1,2-Dibromo-3-Chloropropane	5	5	U	UG/L
4/17/2014	US-05D	1,2-Dibromoethane	2	2	U	UG/L
4/17/2014	US-05D	1,2-Dichloroethane	1	1	U	UG/L
4/17/2014	US-05D	1,2-Dichloropropane	1.7	1.7	U	UG/L
4/17/2014	US-05D	Benzene	1.6	1.6	U	UG/L
4/17/2014	US-05D	Carbon tetrachloride	2	2	U	UG/L
4/17/2014	US-05D	Chlorobenzene	1.6	1.6	U	UG/L
4/17/2014	US-05D	Chloroethane	2.5	2.5	U	UG/L
4/17/2014	US-05D	cis-1,2-Dichloroethene	1.8	1.8	U	UG/L
4/17/2014	US-05D	Ethylbenzene	1.6	1.6	U	UG/L
4/17/2014	US-05D	Methylene Chloride	1.3	1.3	U	UG/L
4/17/2014	US-05D	Styrene	1.7	1.7	U	UG/L
4/17/2014	US-05D	Tetrachloroethene	2.1	2.1	U	UG/L
4/17/2014	US-05D	Toluene	1.6	1.6	U	UG/L
4/17/2014	US-05D	trans-1,2-Dichloroethene	1.9	1.9	U	UG/L
4/17/2014	US-05D	Trichloroethene	1.9	1.9	U	UG/L
4/17/2014	US-05D	Vinyl chloride	2.3	2.3	U	UG/L
4/17/2014	US-05D	Xylenes, Total	3	3	U	UG/L
4/17/2014	US-05D	Ethane	15	15	U	UG/L

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Sample Date	Sample Point	Parameter	Result	Reporting Limit	Flags	UM
4/17/2014	US-05D	Ethene	13	13	U	UG/L
4/17/2014	US-05D	Methane	8	8	U	UG/L
4/17/2014	US-05D	Alkalinity, Total	199	10		MG/L
4/17/2014	US-05D	Calcium and Magnesium Hardness, Dissolved	130000	500		UG/L
4/17/2014	US-05D	Total Dissolved Solids Field Filtered	267	5		MG/L
4/17/2014	US-05D	Orthophosphate	0.02	0.02	U	MG/L AS P
4/17/2014	US-05D	Sulfide	1	1	U	MG/L
4/17/2014	US-05D	Biochemical Oxygen Demand	2	2	U	MG/L
4/17/2014	US-05D	Total Organic Carbon	1.7	1		MG/L
4/18/2014	US-06D	Fluoride, Dissolved	1	0.5		MG/L
4/18/2014	US-06D	Ammonia as N	0.82	0.1		MG/L AS N
4/18/2014	US-06D	Total Kjeldahl Nitrogen	0.93	0.15		MG/L AS N
4/18/2014	US-06D	Nitrate, Dissolved	0.02	0.02	U	MG/L AS N
4/18/2014	US-06D	Nitrite	0.02	0.02	U	MG/L AS N
4/18/2014	US-06D	Total Recoverable Phenolics	0.005	0.005	U	MG/L
4/18/2014	US-06D	Aldicarb	2.5	2.5	U	UG/L
4/18/2014	US-06D	Carbofuran	2.5	2.5	U	UG/L
4/18/2014	US-06D	Endothall	25	25	U	UG/L
4/18/2014	US-06D	Arsenic, Dissolved	10	10	U	UG/L
4/18/2014	US-06D	Barium, Dissolved	200	200	U	UG/L
4/18/2014	US-06D	Boron, Dissolved	503	100		UG/L
4/18/2014	US-06D	Cadmium, Dissolved	5	5	U	UG/L
4/18/2014	US-06D	Calcium, Dissolved	31500	5000		UG/L
4/18/2014	US-06D	Chromium, Dissolved	10	10	U	UG/L
4/18/2014	US-06D	Cobalt, Dissolved	10	10	U	UG/L
4/18/2014	US-06D	Copper, Dissolved	10	10	U	UG/L
4/18/2014	US-06D	Iron, Dissolved	501	100		UG/L
4/18/2014	US-06D	Lead, Dissolved	3	3	U	UG/L
4/18/2014	US-06D	Magnesium, Dissolved	19900	5000		UG/L
4/18/2014	US-06D	Manganese, Dissolved	20.6	5		UG/L
4/18/2014	US-06D	Nickel, Dissolved	10	10	U	UG/L
4/18/2014	US-06D	Silver, Dissolved	10	10	U	UG/L
4/18/2014	US-06D	Zinc, Dissolved	20	20	U	UG/L
4/18/2014	US-06D	Antimony, Dissolved	0.6	0.6	U	UG/L
4/18/2014	US-06D	Beryllium, Dissolved	0.4	0.4	U ^	UG/L
4/18/2014	US-06D	Selenium, Dissolved	5	5	U	UG/L
4/18/2014	US-06D	Thallium, Dissolved	0.2	0.2	U	UG/L
4/18/2014	US-06D	Mercury, Dissolved	0.2	0.2	U	UG/L
4/18/2014	US-06D	alpha-Chlordane	0.05	0.05	U	UG/L
4/18/2014	US-06D	Endrin	0.1	0.1	U	UG/L
4/18/2014	US-06D	gamma-BHC (Lindane)	0.05	0.05	U	UG/L
4/18/2014	US-06D	gamma-Chlordane	0.05	0.05	U	UG/L
4/18/2014	US-06D	Heptachlor	0.05	0.05	U	UG/L
4/18/2014	US-06D	Heptachlor epoxide	0.05	0.05	U	UG/L
4/18/2014	US-06D	Methoxychlor	0.5	0.5	U	UG/L
4/18/2014	US-06D	Toxaphene	5	5	U	UG/L
4/18/2014	US-06D	Aroclor 1016	0.47	0.47	U	UG/L
4/18/2014	US-06D	Aroclor 1221	0.47	0.47	U	UG/L
4/18/2014	US-06D	Aroclor 1232	0.47	0.47	U	UG/L
4/18/2014	US-06D	Aroclor 1242	0.47	0.47	U	UG/L
4/18/2014	US-06D	Aroclor 1248	0.47	0.47	U	UG/L

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Sample Date	Sample Point	Parameter	Result	Reporting Limit	Flags	UM
4/18/2014	US-06D	Aroclor 1254	0.47	0.47	U	UG/L
4/18/2014	US-06D	Aroclor 1260	0.47	0.47	U	UG/L
4/18/2014	US-06D	2,4,5-TP (Silvex)	2	2	U	UG/L
4/18/2014	US-06D	2,4-D	10	10	U	UG/L
4/18/2014	US-06D	Dalapon	1	1	U	UG/L
4/18/2014	US-06D	Dinoseb	1	1	U	UG/L
4/18/2014	US-06D	Picloram	1	1	U	UG/L
4/18/2014	US-06D	1,2-Dichlorobenzene	0.21	0.15		UG/L
4/18/2014	US-06D	1,4-Dichlorobenzene	0.1	0.1	U	UG/L
4/18/2014	US-06D	Alachlor	1	1	U	UG/L
4/18/2014	US-06D	Atrazine	3	3	U *	UG/L
4/18/2014	US-06D	Benzo(a)pyrene	0.14	0.14	U	UG/L
4/18/2014	US-06D	Bis(2-ethylhexyl) phthalate	4.8	4.8	U	UG/L
4/18/2014	US-06D	Hexachlorocyclopentadiene	0.7	0.7	U	UG/L
4/18/2014	US-06D	Pentachlorophenol	0.35	0.35	U	UG/L
4/18/2014	US-06D	Simazine	4	4	U	UG/L
4/18/2014	US-06D	Dissolved Cyanide	0.01	0.01	U	MG/L
4/18/2014	US-06D	Chloride, Dissolved	3.6	1		MG/L
4/18/2014	US-06D	Sulfate	119	7.5		MG/L
4/18/2014	US-06D	Sulfate, Dissolved	119	7.5		MG/L
4/18/2014	US-06D	Nitrogen, Nitrate	0.02	0.02	U	MG/L AS N
4/18/2014	US-06D	1,1,1-Trichloroethane	2.1	2.1	U	UG/L
4/18/2014	US-06D	1,1,2-Trichloroethane	1.9	1.9	U	UG/L
4/18/2014	US-06D	1,1-Dichloroethene	2.5	2.5	U	UG/L
4/18/2014	US-06D	1,2,4-Trichlorobenzene	1	1	U	UG/L
4/18/2014	US-06D	1,2-Dibromo-3-Chloropropane	5	5	U	UG/L
4/18/2014	US-06D	1,2-Dibromoethane	2	2	U	UG/L
4/18/2014	US-06D	1,2-Dichloroethane	1	1	U	UG/L
4/18/2014	US-06D	1,2-Dichloropropane	1.7	1.7	U	UG/L
4/18/2014	US-06D	Benzene	1.6	1.6	U	UG/L
4/18/2014	US-06D	Carbon tetrachloride	2	2	U	UG/L
4/18/2014	US-06D	Chlorobenzene	1.6	1.6	U	UG/L
4/18/2014	US-06D	Chloroethane	2.5	2.5	U	UG/L
4/18/2014	US-06D	cis-1,2-Dichloroethene	1.8	1.8	U	UG/L
4/18/2014	US-06D	Ethylbenzene	1.6	1.6	U	UG/L
4/18/2014	US-06D	Methylene Chloride	1.3	1.3	U	UG/L
4/18/2014	US-06D	Styrene	1.7	1.7	U	UG/L
4/18/2014	US-06D	Tetrachloroethene	2.1	2.1	U	UG/L
4/18/2014	US-06D	Toluene	1.6	1.6	U	UG/L
4/18/2014	US-06D	trans-1,2-Dichloroethene	1.9	1.9	U	UG/L
4/18/2014	US-06D	Trichloroethene	1.9	1.9	U	UG/L
4/18/2014	US-06D	Vinyl chloride	2.3	2.3	U	UG/L
4/18/2014	US-06D	Xylenes, Total	3	3	U	UG/L
4/18/2014	US-06D	Ethane	15	15	U	UG/L
4/18/2014	US-06D	Ethene	13	13	U	UG/L
4/18/2014	US-06D	Methane	8	8	U	UG/L
4/18/2014	US-06D	Alkalinity, Total	180	10		MG/L
4/18/2014	US-06D	Calcium and Magnesium Hardness, Dissolved	160000	500		UG/L
4/18/2014	US-06D	Total Dissolved Solids Field Filtered	328	5		MG/L
4/18/2014	US-06D	Orthophosphate	0.35	0.02		MG/L AS P
4/18/2014	US-06D	Sulfide	1	1	U	MG/L

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Sample Date	Sample Point	Parameter	Result	Reporting Limit	Flags	UM
4/18/2014	US-06D	Biochemical Oxygen Demand	2	2	U *	MG/L
4/18/2014	US-06D	Total Organic Carbon	2.2	1		MG/L
4/17/2014	W-03D	Fluoride, Dissolved	0.78	0.5		MG/L
4/17/2014	W-03D	Ammonia as N	0.11	0.1		MG/L AS N
4/17/2014	W-03D	Total Kjeldahl Nitrogen	0.2	0.15		MG/L AS N
4/17/2014	W-03D	Nitrate, Dissolved	0.02	0.02	U	MG/L AS N
4/17/2014	W-03D	Nitrite	0.02	0.02	U	MG/L AS N
4/17/2014	W-03D	Total Recoverable Phenolics	0.005	0.005	U	MG/L
4/17/2014	W-03D	Aldicarb	2.5	2.5	U *	UG/L
4/17/2014	W-03D	Carbofuran	2.5	2.5	U	UG/L
4/17/2014	W-03D	Endothall	25	25	U	UG/L
4/17/2014	W-03D	Arsenic, Dissolved	10	10	U	UG/L
4/17/2014	W-03D	Barium, Dissolved	200	200	U	UG/L
4/17/2014	W-03D	Boron, Dissolved	100	100	U	UG/L
4/17/2014	W-03D	Cadmium, Dissolved	5	5	U	UG/L
4/17/2014	W-03D	Calcium, Dissolved	85500	5000		UG/L
4/17/2014	W-03D	Chromium, Dissolved	10	10	U	UG/L
4/17/2014	W-03D	Cobalt, Dissolved	10	10	U	UG/L
4/17/2014	W-03D	Copper, Dissolved	10	10	U	UG/L
4/17/2014	W-03D	Iron, Dissolved	1450	100		UG/L
4/17/2014	W-03D	Lead, Dissolved	3	3	U	UG/L
4/17/2014	W-03D	Magnesium, Dissolved	52800	5000		UG/L
4/17/2014	W-03D	Manganese, Dissolved	57.7	5		UG/L
4/17/2014	W-03D	Nickel, Dissolved	10	10	U	UG/L
4/17/2014	W-03D	Silver, Dissolved	10	10	U	UG/L
4/17/2014	W-03D	Zinc, Dissolved	20	20	U	UG/L
4/17/2014	W-03D	Antimony, Dissolved	0.6	0.6	U	UG/L
4/17/2014	W-03D	Beryllium, Dissolved	0.4	0.4	U	UG/L
4/17/2014	W-03D	Selenium, Dissolved	5	5	U	UG/L
4/17/2014	W-03D	Thallium, Dissolved	0.2	0.2	U	UG/L
4/17/2014	W-03D	Mercury, Dissolved	0.2	0.2	U	UG/L
4/17/2014	W-03D	alpha-Chlordane	0.05	0.05	U	UG/L
4/17/2014	W-03D	Endrin	0.1	0.1	U	UG/L
4/17/2014	W-03D	gamma-BHC (Lindane)	0.05	0.05	U	UG/L
4/17/2014	W-03D	gamma-Chlordane	0.05	0.05	U	UG/L
4/17/2014	W-03D	Heptachlor	0.05	0.05	U	UG/L
4/17/2014	W-03D	Heptachlor epoxide	0.05	0.05	U	UG/L
4/17/2014	W-03D	Methoxychlor	0.5	0.5	U	UG/L
4/17/2014	W-03D	Toxaphene	5	5	U	UG/L
4/17/2014	W-03D	Aroclor 1016	0.47	0.47	U	UG/L
4/17/2014	W-03D	Aroclor 1221	0.47	0.47	U	UG/L
4/17/2014	W-03D	Aroclor 1232	0.47	0.47	U	UG/L
4/17/2014	W-03D	Aroclor 1242	0.47	0.47	U	UG/L
4/17/2014	W-03D	Aroclor 1248	0.47	0.47	U	UG/L
4/17/2014	W-03D	Aroclor 1254	0.47	0.47	U	UG/L
4/17/2014	W-03D	Aroclor 1260	0.47	0.47	U	UG/L
4/17/2014	W-03D	2,4,5-TP (Silvex)	2	2	U	UG/L
4/17/2014	W-03D	2,4-D	10	10	U	UG/L
4/17/2014	W-03D	Dalapon	1	1	U	UG/L
4/17/2014	W-03D	Dinoseb	1	1	U	UG/L
4/17/2014	W-03D	Picloram	1	1	U	UG/L

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Sample Date	Sample Point	Parameter	Result	Reporting Limit	Flags	UM
4/17/2014	W-03D	1,2-Dichlorobenzene	0.15	0.15	U	UG/L
4/17/2014	W-03D	1,4-Dichlorobenzene	0.1	0.1	U	UG/L
4/17/2014	W-03D	Alachlor	1	1	U	UG/L
4/17/2014	W-03D	Atrazine	3	3	U	UG/L
4/17/2014	W-03D	Benzo(a)pyrene	0.13	0.13	U	UG/L
4/17/2014	W-03D	Bis(2-ethylhexyl) phthalate	11	4.8		UG/L
4/17/2014	W-03D	Hexachlorocyclopentadiene	0.7	0.7	U	UG/L
4/17/2014	W-03D	Pentachlorophenol	0.34	0.34	U	UG/L
4/17/2014	W-03D	Simazine	4	4	U	UG/L
4/17/2014	W-03D	Dissolved Cyanide	0.01	0.01	U	MG/L
4/17/2014	W-03D	Chloride, Dissolved	102	1.7		MG/L
4/17/2014	W-03D	Sulfate	82.8	7.5		MG/L
4/17/2014	W-03D	Sulfate, Dissolved	90.5	7.5		MG/L
4/17/2014	W-03D	Nitrogen, Nitrate	0.02	0.02	U	MG/L AS N
4/17/2014	W-03D	1,1,1-Trichloroethane	2.1	2.1	U	UG/L
4/17/2014	W-03D	1,1,2-Trichloroethane	1.9	1.9	U	UG/L
4/17/2014	W-03D	1,1-Dichloroethene	2.5	2.5	U	UG/L
4/17/2014	W-03D	1,2,4-Trichlorobenzene	1	1	U	UG/L
4/17/2014	W-03D	1,2-Dibromo-3-Chloropropane	5	5	U	UG/L
4/17/2014	W-03D	1,2-Dibromoethane	2	2	U	UG/L
4/17/2014	W-03D	1,2-Dichloroethane	1	1	U	UG/L
4/17/2014	W-03D	1,2-Dichloropropane	1.7	1.7	U	UG/L
4/17/2014	W-03D	Benzene	1.6	1.6	U	UG/L
4/17/2014	W-03D	Carbon tetrachloride	2	2	U	UG/L
4/17/2014	W-03D	Chlorobenzene	1.6	1.6	U	UG/L
4/17/2014	W-03D	Chloroethane	2.5	2.5	U	UG/L
4/17/2014	W-03D	cis-1,2-Dichloroethene	1.8	1.8	U	UG/L
4/17/2014	W-03D	Ethylbenzene	1.6	1.6	U	UG/L
4/17/2014	W-03D	Methylene Chloride	1.3	1.3	U	UG/L
4/17/2014	W-03D	Styrene	1.7	1.7	U	UG/L
4/17/2014	W-03D	Tetrachloroethene	2.1	2.1	U	UG/L
4/17/2014	W-03D	Toluene	1.6	1.6	U	UG/L
4/17/2014	W-03D	trans-1,2-Dichloroethene	1.9	1.9	U	UG/L
4/17/2014	W-03D	Trichloroethene	1.9	1.9	U	UG/L
4/17/2014	W-03D	Vinyl chloride	2.3	2.3	U	UG/L
4/17/2014	W-03D	Xylenes, Total	3	3	U	UG/L
4/17/2014	W-03D	Ethane	15	15	U	UG/L
4/17/2014	W-03D	Ethene	13	13	U	UG/L
4/17/2014	W-03D	Methane	29	8		UG/L
4/17/2014	W-03D	Alkalinity, Total	353	10		MG/L
4/17/2014	W-03D	Calcium and Magnesium Hardness, Dissolved	431000	500		UG/L
4/17/2014	W-03D	Total Dissolved Solids Field Filtered	667	5		MG/L
4/17/2014	W-03D	Orthophosphate	0.04	0.02		MG/L AS P
4/17/2014	W-03D	Sulfide	1	1	U	MG/L
4/17/2014	W-03D	Biochemical Oxygen Demand	2	2	U	MG/L
4/17/2014	W-03D	Total Organic Carbon	2	1		MG/L
4/18/2014	W-08D	Fluoride, Dissolved	0.5	0.5	U	MG/L
4/18/2014	W-08D	Ammonia as N	0.47	0.1		MG/L AS N
4/18/2014	W-08D	Total Kjeldahl Nitrogen	0.91	0.15		MG/L AS N
4/18/2014	W-08D	Nitrate, Dissolved	0.02	0.02	U	MG/L AS N
4/18/2014	W-08D	Nitrite	0.02	0.02	U	MG/L AS N

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Sample Date	Sample Point	Parameter	Result	Reporting Limit	Flags	UM
4/18/2014	W-08D	Total Recoverable Phenolics	0.005	0.005	U	MG/L
4/18/2014	W-08D	Aldicarb	2.5	2.5	U	UG/L
4/18/2014	W-08D	Carbofuran	2.5	2.5	U	UG/L
4/18/2014	W-08D	Endothall	25	25	U	UG/L
4/18/2014	W-08D	Arsenic, Dissolved	10	10	U	UG/L
4/18/2014	W-08D	Barium, Dissolved	200	200	U	UG/L
4/18/2014	W-08D	Boron, Dissolved	100	100	U	UG/L
4/18/2014	W-08D	Cadmium, Dissolved	5	5	U	UG/L
4/18/2014	W-08D	Calcium, Dissolved	105000	5000		UG/L
4/18/2014	W-08D	Chromium, Dissolved	10	10	U	UG/L
4/18/2014	W-08D	Cobalt, Dissolved	10	10	U	UG/L
4/18/2014	W-08D	Copper, Dissolved	10	10	U	UG/L
4/18/2014	W-08D	Iron, Dissolved	3850	100	^	UG/L
4/18/2014	W-08D	Lead, Dissolved	3	3	U	UG/L
4/18/2014	W-08D	Magnesium, Dissolved	48100	5000		UG/L
4/18/2014	W-08D	Manganese, Dissolved	193	5		UG/L
4/18/2014	W-08D	Nickel, Dissolved	10	10	U	UG/L
4/18/2014	W-08D	Silver, Dissolved	10	10	U	UG/L
4/18/2014	W-08D	Zinc, Dissolved	20	20	U	UG/L
4/18/2014	W-08D	Antimony, Dissolved	0.6	0.6	U	UG/L
4/18/2014	W-08D	Beryllium, Dissolved	0.4	0.4	U ^	UG/L
4/18/2014	W-08D	Selenium, Dissolved	5	5	U	UG/L
4/18/2014	W-08D	Thallium, Dissolved	0.2	0.2	U	UG/L
4/18/2014	W-08D	Mercury, Dissolved	0.2	0.2	U	UG/L
4/18/2014	W-08D	alpha-Chlordane	0.05	0.05	U	UG/L
4/18/2014	W-08D	Endrin	0.1	0.1	U	UG/L
4/18/2014	W-08D	gamma-BHC (Lindane)	0.05	0.05	U	UG/L
4/18/2014	W-08D	gamma-Chlordane	0.05	0.05	U	UG/L
4/18/2014	W-08D	Heptachlor	0.05	0.05	U	UG/L
4/18/2014	W-08D	Heptachlor epoxide	0.05	0.05	U	UG/L
4/18/2014	W-08D	Methoxychlor	0.5	0.5	U	UG/L
4/18/2014	W-08D	Toxaphene	5	5	U	UG/L
4/18/2014	W-08D	Aroclor 1016	0.47	0.47	U	UG/L
4/18/2014	W-08D	Aroclor 1221	0.47	0.47	U	UG/L
4/18/2014	W-08D	Aroclor 1232	0.47	0.47	U	UG/L
4/18/2014	W-08D	Aroclor 1242	0.47	0.47	U	UG/L
4/18/2014	W-08D	Aroclor 1248	0.47	0.47	U	UG/L
4/18/2014	W-08D	Aroclor 1254	0.47	0.47	U	UG/L
4/18/2014	W-08D	Aroclor 1260	0.47	0.47	U	UG/L
4/18/2014	W-08D	2,4,5-TP (Silvex)	2	2	U	UG/L
4/18/2014	W-08D	2,4-D	10	10	U	UG/L
4/18/2014	W-08D	Dalapon	1	1	U	UG/L
4/18/2014	W-08D	Dinoseb	1	1	U	UG/L
4/18/2014	W-08D	Picloram	1	1	U	UG/L
4/18/2014	W-08D	1,2-Dichlorobenzene	0.15	0.15	U	UG/L
4/18/2014	W-08D	1,4-Dichlorobenzene	0.1	0.1	U	UG/L
4/18/2014	W-08D	Alachlor	1	1	U	UG/L
4/18/2014	W-08D	Atrazine	3	3	U *	UG/L
4/18/2014	W-08D	Benzo(a)pyrene	0.12	0.12	U	UG/L
4/18/2014	W-08D	Bis(2-ethylhexyl) phthalate	4.8	4.8	U	UG/L
4/18/2014	W-08D	Hexachlorocyclopentadiene	0.7	0.7	U	UG/L

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Sample Date	Sample Point	Parameter	Result	Reporting Limit	Flags	UM
4/18/2014	W-08D	Pentachlorophenol	0.34	0.34	U	UG/L
4/18/2014	W-08D	Simazine	4	4	U	UG/L
4/18/2014	W-08D	Dissolved Cyanide	0.01	0.01	U	MG/L
4/18/2014	W-08D	Chloride, Dissolved	121	1.7		MG/L
4/18/2014	W-08D	Sulfate	1.5	1.5	U	MG/L
4/18/2014	W-08D	Sulfate, Dissolved	1.5	1.5	U	MG/L
4/18/2014	W-08D	Nitrogen, Nitrate	0.02	0.02	U	MG/L AS N
4/18/2014	W-08D	1,1,1-Trichloroethane	2.1	2.1	U	UG/L
4/18/2014	W-08D	1,1,2-Trichloroethane	1.9	1.9	U	UG/L
4/18/2014	W-08D	1,1-Dichloroethene	2.5	2.5	U	UG/L
4/18/2014	W-08D	1,2,4-Trichlorobenzene	1	1	U	UG/L
4/18/2014	W-08D	1,2-Dibromo-3-Chloropropane	5	5	U	UG/L
4/18/2014	W-08D	1,2-Dibromoethane	2	2	U	UG/L
4/18/2014	W-08D	1,2-Dichloroethane	1	1	U	UG/L
4/18/2014	W-08D	1,2-Dichloropropane	1.7	1.7	U	UG/L
4/18/2014	W-08D	Benzene	1.6	1.6	U	UG/L
4/18/2014	W-08D	Carbon tetrachloride	2	2	U	UG/L
4/18/2014	W-08D	Chlorobenzene	1.6	1.6	U	UG/L
4/18/2014	W-08D	Chloroethane	2.5	2.5	U	UG/L
4/18/2014	W-08D	cis-1,2-Dichloroethene	1.8	1.8	U	UG/L
4/18/2014	W-08D	Ethylbenzene	1.6	1.6	U	UG/L
4/18/2014	W-08D	Methylene Chloride	1.3	1.3	U	UG/L
4/18/2014	W-08D	Styrene	1.7	1.7	U	UG/L
4/18/2014	W-08D	Tetrachloroethene	2.1	2.1	U	UG/L
4/18/2014	W-08D	Toluene	1.6	1.6	U	UG/L
4/18/2014	W-08D	trans-1,2-Dichloroethene	1.9	1.9	U	UG/L
4/18/2014	W-08D	Trichloroethene	1.9	1.9	U	UG/L
4/18/2014	W-08D	Vinyl chloride	2.3	2.3	U	UG/L
4/18/2014	W-08D	Xylenes, Total	3	3	U	UG/L
4/18/2014	W-08D	Ethane	15	15	U	UG/L
4/18/2014	W-08D	Ethene	15	15	U	UG/L
4/18/2014	W-08D	Methane	450	10		UG/L
4/18/2014	W-08D	Alkalinity, Total	395	10		MG/L
4/18/2014	W-08D	Calcium and Magnesium Hardness, Dissolved	459000	500		UG/L
4/18/2014	W-08D	Total Dissolved Solids Field Filtered	572	5		MG/L
4/18/2014	W-08D	Orthophosphate	0.02	0.02	U	MG/L AS P
4/18/2014	W-08D	Sulfide	1	1	U	MG/L
4/18/2014	W-08D	Biochemical Oxygen Demand	2	2	U *	MG/L
4/18/2014	W-08D	Total Organic Carbon	5.5	1		MG/L
4/18/2014	G-102	Fluoride, Dissolved	0.5	0.5	U	MG/L
4/18/2014	G-102	Nitrate, Dissolved	0.029	0.02		MG/L
4/18/2014	G-102	Total Recoverable Phenolics	0.005	0.005	U	MG/L
4/18/2014	G-102	Aldicarb	2.5	2.5	U	UG/L
4/18/2014	G-102	Carbofuran	2.5	2.5	U	UG/L
4/18/2014	G-102	Endothall	25	25	U	UG/L
4/18/2014	G-102	Arsenic, Dissolved	10	10	U	UG/L
4/18/2014	G-102	Barium, Dissolved	264	20		UG/L
4/18/2014	G-102	Boron, Dissolved	220	100		UG/L
4/18/2014	G-102	Cadmium, Dissolved	5	5	U	UG/L
4/18/2014	G-102	Calcium, Dissolved	118000	5000		UG/L
4/18/2014	G-102	Chromium, Dissolved	10	10	U	UG/L

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Sample Date	Sample Point	Parameter	Result	Reporting Limit	Flags	UM
4/18/2014	G-102	Cobalt, Dissolved	10	10	U	UG/L
4/18/2014	G-102	Copper, Dissolved	10	10	U	UG/L
4/18/2014	G-102	Iron, Dissolved	4070	100		UG/L
4/18/2014	G-102	Lead, Dissolved	3	3	U	UG/L
4/18/2014	G-102	Magnesium, Dissolved	54900	5000		UG/L
4/18/2014	G-102	Manganese, Dissolved	80.3	5		UG/L
4/18/2014	G-102	Nickel, Dissolved	10	10	U	UG/L
4/18/2014	G-102	Silver, Dissolved	10	10	U	UG/L
4/18/2014	G-102	Zinc, Dissolved	20	20	U	UG/L
4/18/2014	G-102	Antimony, Dissolved	0.6	0.6	U	UG/L
4/18/2014	G-102	Beryllium, Dissolved	0.4	0.4	U	UG/L
4/18/2014	G-102	Selenium, Dissolved	5	5	U	UG/L
4/18/2014	G-102	Thallium, Dissolved	0.2	0.2	U	UG/L
4/18/2014	G-102	Mercury, Dissolved	0.2	0.2	U	UG/L
4/18/2014	G-102	alpha-Chlordane	0.05	0.05	U	UG/L
4/18/2014	G-102	Endrin	0.1	0.1	U	UG/L
4/18/2014	G-102	gamma-BHC (Lindane)	0.047	0.047	U	UG/L
4/18/2014	G-102	gamma-Chlordane	0.05	0.05	U	UG/L
4/18/2014	G-102	Heptachlor	0.047	0.047	U	UG/L
4/18/2014	G-102	Heptachlor epoxide	0.047	0.047	U	UG/L
4/18/2014	G-102	Methoxychlor	0.5	0.5	U	UG/L
4/18/2014	G-102	Toxaphene	5	5	U	UG/L
4/18/2014	G-102	Aroclor 1016	0.47	0.47	U	UG/L
4/18/2014	G-102	Aroclor 1221	0.47	0.47	U	UG/L
4/18/2014	G-102	Aroclor 1232	0.47	0.47	U	UG/L
4/18/2014	G-102	Aroclor 1242	0.47	0.47	U	UG/L
4/18/2014	G-102	Aroclor 1248	0.47	0.47	U	UG/L
4/18/2014	G-102	Aroclor 1254	0.47	0.47	U	UG/L
4/18/2014	G-102	Aroclor 1260	0.47	0.47	U	UG/L
4/18/2014	G-102	2,4,5-TP (Silvex)	2	2	U	UG/L
4/18/2014	G-102	2,4-D	10	10	U	UG/L
4/18/2014	G-102	Dalapon	1	1	U	UG/L
4/18/2014	G-102	Dinoseb	1	1	U	UG/L
4/18/2014	G-102	Picloram	1	1	U	UG/L
4/18/2014	G-102	1,2-Dichlorobenzene	0.15	0.15	U *	UG/L
4/18/2014	G-102	1,4-Dichlorobenzene	0.1	0.1	U	UG/L
4/18/2014	G-102	Alachlor	1	1	U	UG/L
4/18/2014	G-102	Atrazine	3	3	U *	UG/L
4/18/2014	G-102	Benzo(a)pyrene	0.14	0.14	U	UG/L
4/18/2014	G-102	Bis(2-ethylhexyl) phthalate	4.8	4.8	U	UG/L
4/18/2014	G-102	Hexachlorocyclopentadiene	0.7	0.7	U	UG/L
4/18/2014	G-102	Pentachlorophenol	0.36	0.36	U	UG/L
4/18/2014	G-102	Simazine	4	4	U	UG/L
4/18/2014	G-102	Dissolved Cyanide	0.01	0.01	U	MG/L
4/18/2014	G-102	Chloride, Dissolved	371	3.4		MG/L
4/18/2014	G-102	Sulfate, Dissolved	53.2	7.5		MG/L
4/18/2014	G-102	1,1,1-Trichloroethane	2.1	2.1	U	UG/L
4/18/2014	G-102	1,1,2-Trichloroethane	1.9	1.9	U	UG/L
4/18/2014	G-102	1,1-Dichloroethene	2.5	2.5	U	UG/L
4/18/2014	G-102	1,2,4-Trichlorobenzene	1	1	U	UG/L
4/18/2014	G-102	1,2-Dibromo-3-Chloropropane	5	5	U	UG/L

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4/18/2014	G-102	1,2-Dibromoethane	2	2	U	UG/L
4/18/2014	G-102	1,2-Dichloroethane	1	1	U	UG/L
4/18/2014	G-102	1,2-Dichloropropane	1.7	1.7	U	UG/L
4/18/2014	G-102	Benzene	1.6	1.6	U	UG/L
4/18/2014	G-102	Carbon tetrachloride	2	2	U	UG/L
4/18/2014	G-102	Chlorobenzene	1.6	1.6	U	UG/L
4/18/2014	G-102	Chloroethane	2.5	2.5	U	UG/L
4/18/2014	G-102	cis-1,2-Dichloroethene	1.8	1.8	U	UG/L
4/18/2014	G-102	Ethylbenzene	1.6	1.6	U	UG/L
4/18/2014	G-102	Methylene Chloride	1.3	1.3	U	UG/L
4/18/2014	G-102	Styrene	1.7	1.7	U	UG/L
4/18/2014	G-102	Tetrachloroethene	2.1	2.1	U	UG/L
4/18/2014	G-102	Toluene	1.6	1.6	U	UG/L
4/18/2014	G-102	trans-1,2-Dichloroethene	1.9	1.9	U	UG/L
4/18/2014	G-102	Trichloroethene	1.9	1.9	U	UG/L
4/18/2014	G-102	Vinyl chloride	2.3	2.3	U	UG/L
4/18/2014	G-102	Xylenes, Total	3	3	U	UG/L
4/18/2014	G-102	Calcium and Magnesium Hardness, Dissolved	521000	500		UG/L
4/18/2014	G-102	Total Dissolved Solids Field Filtered	974	5		MG/L
4/17/2014	PZ-03U	Fluoride, Dissolved	0.5	0.5	U	MG/L
4/17/2014	PZ-03U	Nitrate, Dissolved	0.098	0.02		MG/L
4/17/2014	PZ-03U	Total Recoverable Phenolics	0.005	0.005	U	MG/L
4/17/2014	PZ-03U	Aldicarb	2.5	2.5	U	UG/L
4/17/2014	PZ-03U	Carbofuran	2.5	2.5	U	UG/L
4/17/2014	PZ-03U	Endothall	25	25	U	UG/L
4/17/2014	PZ-03U	Arsenic, Dissolved	10	10	U	UG/L
4/17/2014	PZ-03U	Barium, Dissolved	150	20		UG/L
4/17/2014	PZ-03U	Boron, Dissolved	100	100	U	UG/L
4/17/2014	PZ-03U	Cadmium, Dissolved	5	5	U	UG/L
4/17/2014	PZ-03U	Calcium, Dissolved	113000	5000		UG/L
4/17/2014	PZ-03U	Chromium, Dissolved	10	10	U	UG/L
4/17/2014	PZ-03U	Cobalt, Dissolved	10	10	U	UG/L
4/17/2014	PZ-03U	Copper, Dissolved	10	10	U	UG/L
4/17/2014	PZ-03U	Iron, Dissolved	4420	100		UG/L
4/17/2014	PZ-03U	Lead, Dissolved	3	3	U	UG/L
4/17/2014	PZ-03U	Magnesium, Dissolved	48000	5000		UG/L
4/17/2014	PZ-03U	Manganese, Dissolved	106	5		UG/L
4/17/2014	PZ-03U	Nickel, Dissolved	10	10	U	UG/L
4/17/2014	PZ-03U	Silver, Dissolved	10	10	U	UG/L
4/17/2014	PZ-03U	Zinc, Dissolved	20	20	U	UG/L
4/17/2014	PZ-03U	Antimony, Dissolved	0.6	0.6	U	UG/L
4/17/2014	PZ-03U	Beryllium, Dissolved	0.4	0.4	U	UG/L
4/17/2014	PZ-03U	Selenium, Dissolved	5	5	U	UG/L
4/17/2014	PZ-03U	Thallium, Dissolved	0.2	0.2	U	UG/L
4/17/2014	PZ-03U	Mercury, Dissolved	0.2	0.2	U	UG/L
4/17/2014	PZ-03U	alpha-Chlordane	0.05	0.05	U	UG/L
4/17/2014	PZ-03U	Endrin	0.1	0.1	U	UG/L
4/17/2014	PZ-03U	gamma-BHC (Lindane)	0.047	0.047	U	UG/L
4/17/2014	PZ-03U	gamma-Chlordane	0.05	0.05	U	UG/L
4/17/2014	PZ-03U	Heptachlor	0.047	0.047	U	UG/L
4/17/2014	PZ-03U	Heptachlor epoxide	0.047	0.047	U	UG/L

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4/17/2014	PZ-03U	Methoxychlor	0.5	0.5	U	UG/L
4/17/2014	PZ-03U	Toxaphene	5	5	U	UG/L
4/17/2014	PZ-03U	Aroclor 1016	0.47	0.47	U	UG/L
4/17/2014	PZ-03U	Aroclor 1221	0.47	0.47	U	UG/L
4/17/2014	PZ-03U	Aroclor 1232	0.47	0.47	U	UG/L
4/17/2014	PZ-03U	Aroclor 1242	0.47	0.47	U	UG/L
4/17/2014	PZ-03U	Aroclor 1248	0.47	0.47	U	UG/L
4/17/2014	PZ-03U	Aroclor 1254	0.47	0.47	U	UG/L
4/17/2014	PZ-03U	Aroclor 1260	0.47	0.47	U	UG/L
4/17/2014	PZ-03U	2,4,5-TP (Silvex)	2	2	U	UG/L
4/17/2014	PZ-03U	2,4-D	10	10	U	UG/L
4/17/2014	PZ-03U	Dalapon	1	1	U	UG/L
4/17/2014	PZ-03U	Dinoseb	1	1	U	UG/L
4/17/2014	PZ-03U	Picloram	1	1	U	UG/L
4/17/2014	PZ-03U	1,2-Dichlorobenzene	0.15	0.15	U	UG/L
4/17/2014	PZ-03U	1,4-Dichlorobenzene	0.1	0.1	U	UG/L
4/17/2014	PZ-03U	Alachlor	1	1	U	UG/L
4/17/2014	PZ-03U	Atrazine	3	3	U	UG/L
4/17/2014	PZ-03U	Benzo(a)pyrene	0.12	0.12	U	UG/L
4/17/2014	PZ-03U	Bis(2-ethylhexyl) phthalate	4.8	4.8	U	UG/L
4/17/2014	PZ-03U	Hexachlorocyclopentadiene	0.7	0.7	U	UG/L
4/17/2014	PZ-03U	Pentachlorophenol	0.34	0.34	U	UG/L
4/17/2014	PZ-03U	Simazine	4	4	U	UG/L
4/17/2014	PZ-03U	Dissolved Cyanide	0.01	0.01	U	MG/L
4/17/2014	PZ-03U	Chloride, Dissolved	143	1.7		MG/L
4/17/2014	PZ-03U	Sulfate, Dissolved	1.5	1.5	U	MG/L
4/17/2014	PZ-03U	1,1,1-Trichloroethane	2.1	2.1	U	UG/L
4/17/2014	PZ-03U	1,1,2-Trichloroethane	1.9	1.9	U	UG/L
4/17/2014	PZ-03U	1,1-Dichloroethene	2.5	2.5	U	UG/L
4/17/2014	PZ-03U	1,2,4-Trichlorobenzene	1	1	U	UG/L
4/17/2014	PZ-03U	1,2-Dibromo-3-Chloropropane	5	5	U	UG/L
4/17/2014	PZ-03U	1,2-Dibromoethane	2	2	U	UG/L
4/17/2014	PZ-03U	1,2-Dichloroethane	1	1	U	UG/L
4/17/2014	PZ-03U	1,2-Dichloropropane	1.7	1.7	U	UG/L
4/17/2014	PZ-03U	Benzene	1.6	1.6	U	UG/L
4/17/2014	PZ-03U	Carbon tetrachloride	2	2	U	UG/L
4/17/2014	PZ-03U	Chlorobenzene	1.6	1.6	U	UG/L
4/17/2014	PZ-03U	Chloroethane	2.5	2.5	U	UG/L
4/17/2014	PZ-03U	cis-1,2-Dichloroethene	1.8	1.8	U	UG/L
4/17/2014	PZ-03U	Ethylbenzene	1.6	1.6	U	UG/L
4/17/2014	PZ-03U	Methylene Chloride	1.3	1.3	U	UG/L
4/17/2014	PZ-03U	Styrene	1.7	1.7	U	UG/L
4/17/2014	PZ-03U	Tetrachloroethene	2.1	2.1	U	UG/L
4/17/2014	PZ-03U	Toluene	1.6	1.6	U	UG/L
4/17/2014	PZ-03U	trans-1,2-Dichloroethene	1.9	1.9	U	UG/L
4/17/2014	PZ-03U	Trichloroethene	1.9	1.9	U	UG/L
4/17/2014	PZ-03U	Vinyl chloride	2.3	2.3	U	UG/L
4/17/2014	PZ-03U	Xylenes, Total	3	3	U	UG/L
4/17/2014	PZ-03U	Calcium and Magnesium Hardness, Dissolved	479000	500		UG/L
4/17/2014	PZ-03U	Total Dissolved Solids Field Filtered	637	5		MG/L
4/17/2014	PZ-04U	Fluoride, Dissolved	0.5	0.5	U	MG/L

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Sample Date	Sample Point	Parameter	Result	Reporting Limit	Flags	UM
4/17/2014	PZ-04U	Nitrate, Dissolved	0.02	0.02	U	MG/L
4/17/2014	PZ-04U	Total Recoverable Phenolics	0.005	0.005	U	MG/L
4/17/2014	PZ-04U	Aldicarb	2.5	2.5	U	UG/L
4/17/2014	PZ-04U	Carbofuran	2.5	2.5	U	UG/L
4/17/2014	PZ-04U	Endothall	25	25	U	UG/L
4/17/2014	PZ-04U	Arsenic, Dissolved	10	10	U	UG/L
4/17/2014	PZ-04U	Barium, Dissolved	106	20		UG/L
4/17/2014	PZ-04U	Boron, Dissolved	100	100	U	UG/L
4/17/2014	PZ-04U	Cadmium, Dissolved	5	5	U	UG/L
4/17/2014	PZ-04U	Calcium, Dissolved	87700	5000		UG/L
4/17/2014	PZ-04U	Chromium, Dissolved	10	10	U	UG/L
4/17/2014	PZ-04U	Cobalt, Dissolved	10	10	U	UG/L
4/17/2014	PZ-04U	Copper, Dissolved	10	10	U	UG/L
4/17/2014	PZ-04U	Iron, Dissolved	2170	100		UG/L
4/17/2014	PZ-04U	Lead, Dissolved	3	3	U	UG/L
4/17/2014	PZ-04U	Magnesium, Dissolved	44200	5000		UG/L
4/17/2014	PZ-04U	Manganese, Dissolved	145	5		UG/L
4/17/2014	PZ-04U	Nickel, Dissolved	10	10	U	UG/L
4/17/2014	PZ-04U	Silver, Dissolved	10	10	U	UG/L
4/17/2014	PZ-04U	Zinc, Dissolved	20	20	U	UG/L
4/17/2014	PZ-04U	Antimony, Dissolved	0.6	0.6	U	UG/L
4/17/2014	PZ-04U	Beryllium, Dissolved	0.4	0.4	U ^	UG/L
4/17/2014	PZ-04U	Selenium, Dissolved	.5	5	U	UG/L
4/17/2014	PZ-04U	Thallium, Dissolved	0.2	0.2	U	UG/L
4/17/2014	PZ-04U	Mercury, Dissolved	0.2	0.2	U	UG/L
4/17/2014	PZ-04U	alpha-Chlordane	0.05	0.05	U	UG/L
4/17/2014	PZ-04U	Endrin	0.1	0.1	U	UG/L
4/17/2014	PZ-04U	gamma-BHC (Lindane)	0.047	0.047	U	UG/L
4/17/2014	PZ-04U	gamma-Chlordane	0.05	0.05	U	UG/L
4/17/2014	PZ-04U	Heptachlor	0.047	0.047	U	UG/L
4/17/2014	PZ-04U	Heptachlor epoxide	0.047	0.047	U	UG/L
4/17/2014	PZ-04U	Methoxychlor	0.5	0.5	U	UG/L
4/17/2014	PZ-04U	Toxaphene	5	5	U	UG/L
4/17/2014	PZ-04U	Aroclor 1016	0.47	0.47	U	UG/L
4/17/2014	PZ-04U	Aroclor 1221	0.47	0.47	U	UG/L
4/17/2014	PZ-04U	Aroclor 1232	0.47	0.47	U	UG/L
4/17/2014	PZ-04U	Aroclor 1242	0.47	0.47	U	UG/L
4/17/2014	PZ-04U	Aroclor 1248	0.47	0.47	U	UG/L
4/17/2014	PZ-04U	Aroclor 1254	0.47	0.47	U	UG/L
4/17/2014	PZ-04U	Aroclor 1260	0.47	0.47	U	UG/L
4/17/2014	PZ-04U	2,4,5-TP (Silvex)	2	2	U	UG/L
4/17/2014	PZ-04U	2,4-D	10	10	U	UG/L
4/17/2014	PZ-04U	Dalapon	1	1	U	UG/L
4/17/2014	PZ-04U	Dinoseb	1	1	U	UG/L
4/17/2014	PZ-04U	Picloram	1	1	U	UG/L
4/17/2014	PZ-04U	1,2-Dichlorobenzene	0.15	0.15	U	UG/L
4/17/2014	PZ-04U	1,4-Dichlorobenzene	0.1	0.1	U	UG/L
4/17/2014	PZ-04U	Alachlor	1	1	U	UG/L
4/17/2014	PZ-04U	Atrazine	3	3	U	UG/L
4/17/2014	PZ-04U	Benzo(a)pyrene	0.13	0.13	U	UG/L
4/17/2014	PZ-04U	Bis(2-ethylhexyl) phthalate	4.8	4.8	U	UG/L

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Sample Date	Sample Point	Parameter	Result	Reporting Limit	Flags	UM
4/17/2014	PZ-04U	Hexachlorocyclopentadiene	0.7	0.7	U	UG/L
4/17/2014	PZ-04U	Pentachlorophenol	0.34	0.34	U	UG/L
4/17/2014	PZ-04U	Simazine	4	4	U	UG/L
4/17/2014	PZ-04U	Dissolved Cyanide	0.01	0.01	U	MG/L
4/17/2014	PZ-04U	Chloride, Dissolved	129	1.7		MG/L
4/17/2014	PZ-04U	Sulfate, Dissolved	1.5	1.5	U	MG/L
4/17/2014	PZ-04U	1,1,1-Trichloroethane	2.1	2.1	U	UG/L
4/17/2014	PZ-04U	1,1,2-Trichloroethane	1.9	1.9	U	UG/L
4/17/2014	PZ-04U	1,1-Dichloroethene	2.5	2.5	U	UG/L
4/17/2014	PZ-04U	1,2,4-Trichlorobenzene	1	1	U	UG/L
4/17/2014	PZ-04U	1,2-Dibromo-3-Chloropropane	5	5	U	UG/L
4/17/2014	PZ-04U	1,2-Dibromoethane	2	2	U	UG/L
4/17/2014	PZ-04U	1,2-Dichloroethane	1	1	U	UG/L
4/17/2014	PZ-04U	1,2-Dichloropropane	1.7	1.7	U	UG/L
4/17/2014	PZ-04U	Benzene	1.6	1.6	U	UG/L
4/17/2014	PZ-04U	Carbon tetrachloride	2	2	U	UG/L
4/17/2014	PZ-04U	Chlorobenzene	1.6	1.6	U	UG/L
4/17/2014	PZ-04U	Chloroethane	2.5	2.5	U	UG/L
4/17/2014	PZ-04U	cis-1,2-Dichloroethene	1.8	1.8	U	UG/L
4/17/2014	PZ-04U	Ethylbenzene	1.6	1.6	U	UG/L
4/17/2014	PZ-04U	Methylene Chloride	1.3	1.3	U	UG/L
4/17/2014	PZ-04U	Styrene	1.7	1.7	U	UG/L
4/17/2014	PZ-04U	Tetrachloroethene	2.1	2.1	U	UG/L
4/17/2014	PZ-04U	Toluene	1.6	1.6	U	UG/L
4/17/2014	PZ-04U	trans-1,2-Dichloroethene	1.9	1.9	U	UG/L
4/17/2014	PZ-04U	Trichloroethene	1.9	1.9	U	UG/L
4/17/2014	PZ-04U	Vinyl chloride	2.3	2.3	U	UG/L
4/17/2014	PZ-04U	Xylenes, Total	3	3	U	UG/L
4/17/2014	PZ-04U	Calcium and Magnesium Hardness, Dissolved	401000	500		UG/L
4/17/2014	PZ-04U	Total Dissolved Solids Field Filtered	585	5		MG/L
4/18/2014	US-04S	Fluoride, Dissolved	0.5	0.5	U	MG/L
4/18/2014	US-04S	Nitrate, Dissolved	0.022	0.02		MG/L
4/18/2014	US-04S	Total Recoverable Phenolics	0.005	0.005	U	MG/L
4/18/2014	US-04S	Aldicarb	2.5	2.5	U	UG/L
4/18/2014	US-04S	Carbofuran	2.5	2.5	U	UG/L
4/18/2014	US-04S	Endothall	25	25	U	UG/L
4/18/2014	US-04S	Arsenic, Dissolved	10	10	U	UG/L
4/18/2014	US-04S	Barium, Dissolved	147	20		UG/L
4/18/2014	US-04S	Boron, Dissolved	196	100		UG/L
4/18/2014	US-04S	Cadmium, Dissolved	5	5	U	UG/L
4/18/2014	US-04S	Calcium, Dissolved	107000	5000		UG/L
4/18/2014	US-04S	Chromium, Dissolved	10	10	U	UG/L
4/18/2014	US-04S	Cobalt, Dissolved	10	10	U	UG/L
4/18/2014	US-04S	Copper, Dissolved	10	10	U	UG/L
4/18/2014	US-04S	Iron, Dissolved	2810	100		UG/L
4/18/2014	US-04S	Lead, Dissolved	3	3	U	UG/L
4/18/2014	US-04S	Magnesium, Dissolved	46400	5000		UG/L
4/18/2014	US-04S	Manganese, Dissolved	77.3	5		UG/L
4/18/2014	US-04S	Nickel, Dissolved	10	10	U	UG/L
4/18/2014	US-04S	Silver, Dissolved	10	10	U	UG/L
4/18/2014	US-04S	Zinc, Dissolved	20	20	U	UG/L

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Sample Date	Sample Point	Parameter	Result	Reporting Limit	Flags	UM
4/18/2014	US-04S	Antimony, Dissolved	0.6	0.6	U	UG/L
4/18/2014	US-04S	Beryllium, Dissolved	0.4	0.4	U ^	UG/L
4/18/2014	US-04S	Selenium, Dissolved	5	5	U	UG/L
4/18/2014	US-04S	Thallium, Dissolved	0.2	0.2	U	UG/L
4/18/2014	US-04S	Mercury, Dissolved	0.2	0.2	U	UG/L
4/18/2014	US-04S	alpha-Chlordane	0.05	0.05	U	UG/L
4/18/2014	US-04S	Endrin	0.1	0.1	U	UG/L
4/18/2014	US-04S	gamma-BHC (Lindane)	0.047	0.047	U	UG/L
4/18/2014	US-04S	gamma-Chlordane	0.05	0.05	U	UG/L
4/18/2014	US-04S	Heptachlor	0.047	0.047	U	UG/L
4/18/2014	US-04S	Heptachlor epoxide	0.047	0.047	U	UG/L
4/18/2014	US-04S	Methoxychlor	0.5	0.5	U	UG/L
4/18/2014	US-04S	Toxaphene	5	5	U	UG/L
4/18/2014	US-04S	Aroclor 1016	0.47	0.47	U	UG/L
4/18/2014	US-04S	Aroclor 1221	0.47	0.47	U	UG/L
4/18/2014	US-04S	Aroclor 1232	0.47	0.47	U	UG/L
4/18/2014	US-04S	Aroclor 1242	0.47	0.47	U	UG/L
4/18/2014	US-04S	Aroclor 1248	0.47	0.47	U	UG/L
4/18/2014	US-04S	Aroclor 1254	0.47	0.47	U	UG/L
4/18/2014	US-04S	Aroclor 1260	0.47	0.47	U	UG/L
4/18/2014	US-04S	2,4,5-TP (Silvex)	2	2	U	UG/L
4/18/2014	US-04S	2,4-D	10	10	U	UG/L
4/18/2014	US-04S	Dalapon	1	1	U	UG/L
4/18/2014	US-04S	Dinoseb	1	1	U	UG/L
4/18/2014	US-04S	Picloram	1	1	U	UG/L
4/18/2014	US-04S	1,2-Dichlorobenzene	0.15	0.15	U *	UG/L
4/18/2014	US-04S	1,4-Dichlorobenzene	0.1	0.1	U	UG/L
4/18/2014	US-04S	Alachlor	1	1	U	UG/L
4/18/2014	US-04S	Atrazine	3	3	U *	UG/L
4/18/2014	US-04S	Benzo(a)pyrene	0.13	0.13	U	UG/L
4/18/2014	US-04S	Bis(2-ethylhexyl) phthalate	4.8	4.8	U	UG/L
4/18/2014	US-04S	Hexachlorocyclopentadiene	0.7	0.7	U	UG/L
4/18/2014	US-04S	Pentachlorophenol	0.34	0.34	U	UG/L
4/18/2014	US-04S	Simazine	4	4	U	UG/L
4/18/2014	US-04S	Dissolved Cyanide	0.01	0.01	U	MG/L
4/18/2014	US-04S	Chloride, Dissolved	293	3.4		MG/L
4/18/2014	US-04S	Sulfate, Dissolved	64.8	3		MG/L
4/18/2014	US-04S	1,1,1-Trichloroethane	2.1	2.1	U	UG/L
4/18/2014	US-04S	1,1,2-Trichloroethane	1.9	1.9	U	UG/L
4/18/2014	US-04S	1,1-Dichloroethene	2.5	2.5	U	UG/L
4/18/2014	US-04S	1,2,4-Trichlorobenzene	1	1	U	UG/L
4/18/2014	US-04S	1,2-Dibromo-3-Chloropropane	5	5	U	UG/L
4/18/2014	US-04S	1,2-Dibromoethane	2	2	U	UG/L
4/18/2014	US-04S	1,2-Dichloroethane	1	1	U	UG/L
4/18/2014	US-04S	1,2-Dichloropropane	1.7	1.7	U	UG/L
4/18/2014	US-04S	Benzene	1.6	1.6	U	UG/L
4/18/2014	US-04S	Carbon tetrachloride	2	2	U	UG/L
4/18/2014	US-04S	Chlorobenzene	1.6	1.6	U	UG/L
4/18/2014	US-04S	Chloroethane	2.5	2.5	U	UG/L
4/18/2014	US-04S	cis-1,2-Dichloroethene	23	1.8		UG/L
4/18/2014	US-04S	Ethylbenzene	1.6	1.6	U	UG/L

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Sample Date	Sample Point	Parameter	Result	Reporting Limit	Flags	UM
4/18/2014	US-04S	Methylene Chloride	1.3	1.3	U	UG/L
4/18/2014	US-04S	Styrene	1.7	1.7	U	UG/L
4/18/2014	US-04S	Tetrachloroethene	2.1	2.1	U	UG/L
4/18/2014	US-04S	Toluene	1.6	1.6	U	UG/L
4/18/2014	US-04S	trans-1,2-Dichloroethene	2.1	1.9		UG/L
4/18/2014	US-04S	Trichloroethene	1.9	1.9	U	UG/L
4/18/2014	US-04S	Vinyl chloride	2.3	2.3	U	UG/L
4/18/2014	US-04S	Xylenes, Total	3	3	U	UG/L
4/18/2014	US-04S	Calcium and Magnesium Hardness, Dissolved	458000	500		UG/L
4/18/2014	US-04S	Total Dissolved Solids Field Filtered	929	5		MG/L
4/18/2014	US-06S	Fluoride, Dissolved	0.5	0.5	U	MG/L
4/18/2014	US-06S	Nitrate, Dissolved	0.02	0.02	U	MG/L
4/18/2014	US-06S	Total Recoverable Phenolics	0.005	0.005	U	MG/L
4/18/2014	US-06S	Aldicarb	2.5	2.5	U	UG/L
4/18/2014	US-06S	Carbofuran	2.5	2.5	U	UG/L
4/18/2014	US-06S	Endothall	25	25	U	UG/L
4/18/2014	US-06S	Arsenic, Dissolved	10	10	U	UG/L
4/18/2014	US-06S	Barium, Dissolved	122	20		UG/L
4/18/2014	US-06S	Boron, Dissolved	100	100	U	UG/L
4/18/2014	US-06S	Cadmium, Dissolved	5	5	U	UG/L
4/18/2014	US-06S	Calcium, Dissolved	126000	5000		UG/L
4/18/2014	US-06S	Chromium, Dissolved	10	10	U	UG/L
4/18/2014	US-06S	Cobalt, Dissolved	10	10	U	UG/L
4/18/2014	US-06S	Copper, Dissolved	10	10	U	UG/L
4/18/2014	US-06S	Iron, Dissolved	4000	100		UG/L
4/18/2014	US-06S	Lead, Dissolved	3	3	U	UG/L
4/18/2014	US-06S	Magnesium, Dissolved	58700	5000		UG/L
4/18/2014	US-06S	Manganese, Dissolved	96.2	5		UG/L
4/18/2014	US-06S	Nickel, Dissolved	10	10	U	UG/L
4/18/2014	US-06S	Silver, Dissolved	10	10	U	UG/L
4/18/2014	US-06S	Zinc, Dissolved	20	20	U	UG/L
4/18/2014	US-06S	Antimony, Dissolved	0.6	0.6	U	UG/L
4/18/2014	US-06S	Beryllium, Dissolved	0.4	0.4	U ^	UG/L
4/18/2014	US-06S	Selenium, Dissolved	5	5	U	UG/L
4/18/2014	US-06S	Thallium, Dissolved	0.2	0.2	U	UG/L
4/18/2014	US-06S	Mercury, Dissolved	0.2	0.2	U	UG/L
4/18/2014	US-06S	alpha-Chlordane	0.05	0.05	U	UG/L
4/18/2014	US-06S	Endrin	0.1	0.1	U	UG/L
4/18/2014	US-06S	gamma-BHC (Lindane)	0.047	0.047	U	UG/L
4/18/2014	US-06S	gamma-Chlordane	0.05	0.05	U	UG/L
4/18/2014	US-06S	Heptachlor	0.047	0.047	U	UG/L
4/18/2014	US-06S	Heptachlor epoxide	0.047	0.047	U	UG/L
4/18/2014	US-06S	Methoxychlor	0.5	0.5	U	UG/L
4/18/2014	US-06S	Toxaphene	5	5	U	UG/L
4/18/2014	US-06S	Aroclor 1016	0.47	0.47	U	UG/L
4/18/2014	US-06S	Aroclor 1221	0.47	0.47	U	UG/L
4/18/2014	US-06S	Aroclor 1232	0.47	0.47	U	UG/L
4/18/2014	US-06S	Aroclor 1242	0.47	0.47	U	UG/L
4/18/2014	US-06S	Aroclor 1248	0.47	0.47	U	UG/L
4/18/2014	US-06S	Aroclor 1254	0.47	0.47	U	UG/L
4/18/2014	US-06S	Aroclor 1260	0.47	0.47	U	UG/L

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Sample Date	Sample Point	Parameter	Result	Reporting Limit	Flags	UM
4/18/2014	US-06S	2,4,5-TP (Silvex)	2	2	U	UG/L
4/18/2014	US-06S	2,4-D	10	10	U	UG/L
4/18/2014	US-06S	Dalapon	1	1	U	UG/L
4/18/2014	US-06S	Dinoseb	1	1	U	UG/L
4/18/2014	US-06S	Picloram	1	1	U	UG/L
4/18/2014	US-06S	1,2-Dichlorobenzene	0.15	0.15	U *	UG/L
4/18/2014	US-06S	1,4-Dichlorobenzene	0.1	0.1	U	UG/L
4/18/2014	US-06S	Alachlor	1	1	U	UG/L
4/18/2014	US-06S	Atrazine	3	3	U *	UG/L
4/18/2014	US-06S	Benzo(a)pyrene	0.13	0.13	U	UG/L
4/18/2014	US-06S	Bis(2-ethylhexyl) phthalate	4.8	4.8	U	UG/L
4/18/2014	US-06S	Hexachlorocyclopentadiene	0.7	0.7	U *	UG/L
4/18/2014	US-06S	Pentachlorophenol	0.34	0.34	U	UG/L
4/18/2014	US-06S	Simazine	4	4	U *	UG/L
4/18/2014	US-06S	Dissolved Cyanide	0.01	0.01	U	MG/L
4/18/2014	US-06S	Chloride, Dissolved	120	1.7		MG/L
4/18/2014	US-06S	Sulfate, Dissolved	42.5	7.5		MG/L
4/18/2014	US-06S	1,1,1-Trichloroethane	2.1	2.1	U	UG/L
4/18/2014	US-06S	1,1,2-Trichloroethane	1.9	1.9	U	UG/L
4/18/2014	US-06S	1,1-Dichloroethene	2.5	2.5	U	UG/L
4/18/2014	US-06S	1,2,4-Trichlorobenzene	1	1	U	UG/L
4/18/2014	US-06S	1,2-Dibromo-3-Chloropropane	5	5	U	UG/L
4/18/2014	US-06S	1,2-Dibromoethane	2	2	U	UG/L
4/18/2014	US-06S	1,2-Dichloroethane	1	1	U	UG/L
4/18/2014	US-06S	1,2-Dichloropropane	1.7	1.7	U	UG/L
4/18/2014	US-06S	Benzene	1.6	1.6	U	UG/L
4/18/2014	US-06S	Carbon tetrachloride	2	2	U	UG/L
4/18/2014	US-06S	Chlorobenzene	1.6	1.6	U	UG/L
4/18/2014	US-06S	Chloroethane	2.5	2.5	U	UG/L
4/18/2014	US-06S	cis-1,2-Dichloroethene	1.8	1.8	U	UG/L
4/18/2014	US-06S	Ethylbenzene	1.6	1.6	U	UG/L
4/18/2014	US-06S	Methylene Chloride	1.3	1.3	U	UG/L
4/18/2014	US-06S	Styrene	1.7	1.7	U	UG/L
4/18/2014	US-06S	Tetrachloroethene	2.1	2.1	U	UG/L
4/18/2014	US-06S	Toluene	1.6	1.6	U	UG/L
4/18/2014	US-06S	trans-1,2-Dichloroethene	1.9	1.9	U	UG/L
4/18/2014	US-06S	Trichloroethene	1.9	1.9	U	UG/L
4/18/2014	US-06S	Vinyl chloride	2.3	2.3	U	UG/L
4/18/2014	US-06S	Xylenes, Total	3	3	U	UG/L
4/18/2014	US-06S	Calcium and Magnesium Hardness, Dissolved	555000	500		UG/L
4/18/2014	US-06S	Total Dissolved Solids Field Filtered	723	5		MG/L
4/18/2014	W-06S	Fluoride, Dissolved	0.5	0.5	U	MG/L
4/18/2014	W-06S	Nitrate, Dissolved	52.5	0.02		MG/L
4/18/2014	W-06S	Total Recoverable Phenolics	0.018	0.005		MG/L
4/18/2014	W-06S	Aldicarb	2.5	2.5	U	UG/L
4/18/2014	W-06S	Carbofuran	2.5	2.5	U	UG/L
4/18/2014	W-06S	Endothall	25	25	U	UG/L
4/18/2014	W-06S	Arsenic, Dissolved	10	10	U	UG/L
4/18/2014	W-06S	Barium, Dissolved	85.1	20		UG/L
4/18/2014	W-06S	Boron, Dissolved	635	100		UG/L
4/18/2014	W-06S	Cadmium, Dissolved	5	5	U	UG/L

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Sample Date	Sample Point	Parameter	Result	Reporting Limit	Flags	UM
4/18/2014	W-06S	Calcium, Dissolved	351000	5000		UG/L
4/18/2014	W-06S	Chromium, Dissolved	10	10	U	UG/L
4/18/2014	W-06S	Cobalt, Dissolved	10	10	U	UG/L
4/18/2014	W-06S	Copper, Dissolved	10	10	U	UG/L
4/18/2014	W-06S	Iron, Dissolved	100	100	U	UG/L
4/18/2014	W-06S	Lead, Dissolved	3	3	U	UG/L
4/18/2014	W-06S	Magnesium, Dissolved	143000	5000		UG/L
4/18/2014	W-06S	Manganese, Dissolved	337	5		UG/L
4/18/2014	W-06S	Nickel, Dissolved	14.9	10		UG/L
4/18/2014	W-06S	Silver, Dissolved	10	10	U	UG/L
4/18/2014	W-06S	Zinc, Dissolved	20	20	U	UG/L
4/18/2014	W-06S	Antimony, Dissolved	0.84	0.6		UG/L
4/18/2014	W-06S	Beryllium, Dissolved	0.4	0.4	U^	UG/L
4/18/2014	W-06S	Selenium, Dissolved	5	5	U	UG/L
4/18/2014	W-06S	Thallium, Dissolved	0.2	0.2	U	UG/L
4/18/2014	W-06S	Mercury, Dissolved	0.2	0.2	U	UG/L
4/18/2014	W-06S	alpha-Chlordane	0.05	0.05	U	UG/L
4/18/2014	W-06S	Endrin	0.1	0.1	U	UG/L
4/18/2014	W-06S	gamma-BHC (Lindane)	0.047	0.047	U	UG/L
4/18/2014	W-06S	gamma-Chlordane	0.05	0.05	U	UG/L
4/18/2014	W-06S	Heptachlor	0.047	0.047	U	UG/L
4/18/2014	W-06S	Heptachlor epoxide	0.047	0.047	U	UG/L
4/18/2014	W-06S	Methoxychlor	0.5	0.5	U	UG/L
4/18/2014	W-06S	Toxaphene	5	5	U	UG/L
4/18/2014	W-06S	Aroclor 1016	0.47	0.47	U	UG/L
4/18/2014	W-06S	Aroclor 1221	0.47	0.47	U	UG/L
4/18/2014	W-06S	Aroclor 1232	0.47	0.47	U	UG/L
4/18/2014	W-06S	Aroclor 1242	0.47	0.47	U	UG/L
4/18/2014	W-06S	Aroclor 1248	0.47	0.47	U	UG/L
4/18/2014	W-06S	Aroclor 1254	0.47	0.47	U	UG/L
4/18/2014	W-06S	Aroclor 1260	0.47	0.47	U	UG/L
4/18/2014	W-06S	2,4,5-TP (Silvex)	2	2	U	UG/L
4/18/2014	W-06S	2,4-D	10	10	U	UG/L
4/18/2014	W-06S	Dalapon	1	1	U	UG/L
4/18/2014	W-06S	Dinoseb	1	1	U	UG/L
4/18/2014	W-06S	Picloram	1	1	U	UG/L
4/18/2014	W-06S	1,2-Dichlorobenzene	0.15	0.15	U *	UG/L
4/18/2014	W-06S	1,4-Dichlorobenzene	0.1	0.1	U	UG/L
4/18/2014	W-06S	Alachlor	1	1	U	UG/L
4/18/2014	W-06S	Atrazine	3	3	U *	UG/L
4/18/2014	W-06S	Benzo(a)pyrene	0.12	0.12	U	UG/L
4/18/2014	W-06S	Bis(2-ethylhexyl) phthalate	4.8	4.8	U	UG/L
4/18/2014	W-06S	Hexachlorocyclopentadiene	0.7	0.7	U	UG/L
4/18/2014	W-06S	Pentachlorophenol	0.34	0.34	U	UG/L
4/18/2014	W-06S	Simazine	4	4	U	UG/L
4/18/2014	W-06S	Dissolved Cyanide	0.01	0.01	U	MG/L
4/18/2014	W-06S	Chloride, Dissolved	418	3.4		MG/L
4/18/2014	W-06S	Sulfate, Dissolved	702	22.5		MG/L
4/18/2014	W-06S	1,1,1-Trichloroethane	8.4	8.4	U	UG/L
4/18/2014	W-06S	1,1,2-Trichloroethane	7.6	7.6	U	UG/L
4/18/2014	W-06S	1,1-Dichloroethene	10	10	U	UG/L

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Sample Date	Sample Point	Parameter	Result	Reporting Limit	Flags	UM
4/18/2014	W-06S	1,2,4-Trichlorobenzene	2.3	2.3	U	UG/L
4/18/2014	W-06S	1,2-Dibromo-3-Chloropropane	20	20	U	UG/L
4/18/2014	W-06S	1,2-Dibromoethane	8	8	U	UG/L
4/18/2014	W-06S	1,2-Dichloroethane	3.3	3.3	U	UG/L
4/18/2014	W-06S	1,2-Dichloropropane	6.8	6.8	U	UG/L
4/18/2014	W-06S	Benzene	6.4	6.4	U	UG/L
4/18/2014	W-06S	Carbon tetrachloride	8	8	U	UG/L
4/18/2014	W-06S	Chlorobenzene	6.4	6.4	U	UG/L
4/18/2014	W-06S	Chloroethane	10	10	U	UG/L
4/18/2014	W-06S	cis-1,2-Dichloroethene	10	7.2		UG/L
4/18/2014	W-06S	Ethylbenzene	6.4	6.4	U	UG/L
4/18/2014	W-06S	Methylene Chloride	5.2	5.2	U	UG/L
4/18/2014	W-06S	Styrene	6.8	6.8	U	UG/L
4/18/2014	W-06S	Tetrachloroethene	8.4	8.4	U	UG/L
4/18/2014	W-06S	Toluene	6.4	6.4	U	UG/L
4/18/2014	W-06S	trans-1,2-Dichloroethene	7.6	7.6	U	UG/L
4/18/2014	W-06S	Trichloroethene	7.6	7.6	U	UG/L
4/18/2014	W-06S	Vinyl chloride	9.2	9.2	U	UG/L
4/18/2014	W-06S	Xylenes, Total	3.3	3.3	U	UG/L
4/18/2014	W-06S	Calcium and Magnesium Hardness, Dissolved	1470000	500		UG/L
4/18/2014	W-06S	Total Dissolved Solids Field Filtered	2550	8		MG/L
10/22/2014	R01D	Fluoride, Dissolved	0.71	0.5		MG/L
10/22/2014	R01D	Ammonia	0.77	0.1		MG/L AS N
10/22/2014	R01D	Total Kjeldahl Nitrogen	0.76	0.15		MG/L AS N
10/22/2014	R01D	Nitrate, Dissolved	0.02	0.02	U	MG/L
10/22/2014	R01D	Nitrite	0.02	0.02	U	MG/L AS N
10/22/2014	R01D	Arsenic, Dissolved	10	10	U	UG/L
10/22/2014	R01D	Barium, Dissolved	200	200	U	UG/L
10/22/2014	R01D	Boron, Dissolved	277	100		UG/L
10/22/2014	R01D	Cadmium, Dissolved	5	5	U	UG/L
10/22/2014	R01D	Calcium, Dissolved	49900	5000		UG/L
10/22/2014	R01D	Chromium, Dissolved	10	10	U	UG/L
10/22/2014	R01D	Cobalt, Dissolved	10	10	U	UG/L
10/22/2014	R01D	Copper, Dissolved	10	10	U	UG/L
10/22/2014	R01D	Iron, Dissolved	698	100		UG/L
10/22/2014	R01D	Lead, Dissolved	3	3	U	UG/L
10/22/2014	R01D	Magnesium, Dissolved	36000	5000		UG/L
10/22/2014	R01D	Manganese, Dissolved	12.3	5		UG/L
10/22/2014	R01D	Nickel, Dissolved	10	10	U	UG/L
10/22/2014	R01D	Silver, Dissolved	10	10	U	UG/L
10/22/2014	R01D	Zinc, Dissolved	20	20	U	UG/L
10/22/2014	R01D	Antimony, Dissolved	0.6	0.6	U	UG/L
10/22/2014	R01D	Beryllium, Dissolved	0.4	0.4	U	UG/L
10/22/2014	R01D	Selenium, Dissolved	5	5	U	UG/L
10/22/2014	R01D	Thallium, Dissolved	0.2	0.2	U	UG/L
10/22/2014	R01D	Mercury, Dissolved	0.2	0.2	U	UG/L
10/22/2014	R01D	Dissolved Cyanide	0.01	0.01	U	MG/L
10/22/2014	R01D	Chloride, Dissolved	31.4	1		MG/L
10/22/2014	R01D	Sulfate	33.2	1.5		MG/L
10/22/2014	R01D	Sulfate, Dissolved	31.6	1.5		MG/L
10/22/2014	R01D	Nitrogen, Nitrate	0.033	0.02		MG/L AS N

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Sample Date	Sample Point	Parameter	Result	Reporting Limit	Flags	UM
10/22/2014	R01D	1,1,1-Trichloroethane	2.1	2.1	U	UG/L
10/22/2014	R01D	1,1,2-Trichloroethane	1.9	1.9	U	UG/L
10/22/2014	R01D	1,1-Dichloroethene	2.5	2.5	U	UG/L
10/22/2014	R01D	1,2,4-Trichlorobenzene	1	1	U	UG/L
10/22/2014	R01D	1,2-Dibromo-3-Chloropropane	5	5	U	UG/L
10/22/2014	R01D	1,2-Dibromoethane	2	2	U	UG/L
10/22/2014	R01D	1,2-Dichloroethane	1	1	U	UG/L
10/22/2014	R01D	1,2-Dichloropropane	1.7	1.7	U	UG/L
10/22/2014	R01D	Benzene	1.6	1.6	U	UG/L
10/22/2014	R01D	Carbon tetrachloride	2	2	U	UG/L
10/22/2014	R01D	Chlorobenzene	1.6	1.6	U	UG/L
10/22/2014	R01D	Chloroethane	2.5	2.5	U	UG/L
10/22/2014	R01D	cis-1,2-Dichloroethene	1.8	1.8	U	UG/L
10/22/2014	R01D	Ethylbenzene	1.6	1.6	U	UG/L
10/22/2014	R01D	Methylene Chloride	1.3	1.3	U	UG/L
10/22/2014	R01D	Styrene	1.7	1.7	U	UG/L
10/22/2014	R01D	Tetrachloroethene	2.1	2.1	U	UG/L
10/22/2014	R01D	Toluene	1.6	1.6	U	UG/L
10/22/2014	R01D	trans-1,2-Dichloroethene	1.9	1.9	U	UG/L
10/22/2014	R01D	Trichloroethene	1.9	1.9	U	UG/L
10/22/2014	R01D	Vinyl chloride	2.3	2.3	U	UG/L
10/22/2014	R01D	Xylenes, Total	3	3	U	UG/L
10/22/2014	R01D	Ethane	15	15	U	UG/L
10/22/2014	R01D	Ethene	13	13	U	UG/L
10/22/2014	R01D	Methane	8	8	U	UG/L
10/22/2014	R01D	Alkalinity, Total	308	10		MG/L
10/22/2014	R01D	Calcium and Magnesium Hardness, Dissolved	273000	500		UG/L
10/22/2014	R01D	Total Dissolved Solids Field Filtered	400	5		MG/L
10/22/2014	R01D	Orthophosphate	0.15	0.02		MG/L AS P
10/22/2014	R01D	Sulfide	1	1	U	MG/L
10/22/2014	R01D	Biochemical Oxygen Demand	2	2	U	MG/L
10/22/2014	R01D	Total Organic Carbon	1	1		MG/L
10/22/2014	US-01D	Fluoride, Dissolved	0.5	0.5	U	MG/L
10/22/2014	US-01D	Ammonia	0.88	0.1		MG/L AS N
10/22/2014	US-01D	Total Kjeldahl Nitrogen	1.1	0.15		MG/L AS N
10/22/2014	US-01D	Nitrate, Dissolved	0.02	0.02		MG/L
10/22/2014	US-01D	Nitrite	0.02	0.02	U	MG/L AS N
10/22/2014	US-01D	Arsenic, Dissolved	10	10	U	UG/L
10/22/2014	US-01D	Barium, Dissolved	200	200	U	UG/L
10/22/2014	US-01D	Boron, Dissolved	262	100		UG/L
10/22/2014	US-01D	Cadmium, Dissolved	5	5	U	UG/L
10/22/2014	US-01D	Calcium, Dissolved	63700	5000		UG/L
10/22/2014	US-01D	Chromium, Dissolved	10	10	U	UG/L
10/22/2014	US-01D	Cobalt, Dissolved	10	10	U	UG/L
10/22/2014	US-01D	Copper, Dissolved	10	10	U	UG/L
10/22/2014	US-01D	Iron, Dissolved	543	100	U	UG/L
10/22/2014	US-01D	Lead, Dissolved	4.5	3	U	UG/L
10/22/2014	US-01D	Magnesium, Dissolved	49600	5000		UG/L
10/22/2014	US-01D	Manganese, Dissolved	36	5		UG/L
10/22/2014	US-01D	Nickel, Dissolved	10	10	U	UG/L
10/22/2014	US-01D	Silver, Dissolved	10	10	U	UG/L

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Sample Date	Sample Point	Parameter	Result	Reporting Limit	Flags	UM
10/22/2014	US-01D	Zinc, Dissolved	20	20	U	UG/L
10/22/2014	US-01D	Antimony, Dissolved	0.6	0.6	U	UG/L
10/22/2014	US-01D	Beryllium, Dissolved	0.4	0.4	U	UG/L
10/22/2014	US-01D	Selenium, Dissolved	5	5	U	UG/L
10/22/2014	US-01D	Thallium, Dissolved	0.2	0.2	U	UG/L
10/22/2014	US-01D	Mercury, Dissolved	0.2	0.2	U	UG/L
10/22/2014	US-01D	Dissolved Cyanide	0.01	0.01	U	MG/L
10/22/2014	US-01D	Chloride, Dissolved	34.9	1		MG/L
10/22/2014	US-01D	Sulfate	124	7.5	B	MG/L
10/22/2014	US-01D	Sulfate, Dissolved	128	7.5		MG/L
10/22/2014	US-01D	Nitrogen, Nitrate	0.02	0.02		MG/L AS N
10/22/2014	US-01D	1,1,1-Trichloroethane	2.1	2.1	U	UG/L
10/22/2014	US-01D	1,1,2-Trichloroethane	1.9	1.9	U	UG/L
10/22/2014	US-01D	1,1-Dichloroethene	2.5	2.5	U	UG/L
10/22/2014	US-01D	1,2,4-Trichlorobenzene	1	1	U	UG/L
10/22/2014	US-01D	1,2-Dibromo-3-Chloropropane	5	5	U	UG/L
10/22/2014	US-01D	1,2-Dibromoethane	2	2	U	UG/L
10/22/2014	US-01D	1,2-Dichloroethane	1	1	U	UG/L
10/22/2014	US-01D	1,2-Dichloropropane	1.7	1.7	U	UG/L
10/22/2014	US-01D	Benzene	1.6	1.6	U	UG/L
10/22/2014	US-01D	Carbon tetrachloride	2	2	U	UG/L
10/22/2014	US-01D	Chlorobenzene	1.6	1.6	U	UG/L
10/22/2014	US-01D	Chloroethane	2.5	2.5	U	UG/L
10/22/2014	US-01D	cis-1,2-Dichloroethene	1.8	1.8	U	UG/L
10/22/2014	US-01D	Ethylbenzene	1.6	1.6	U	UG/L
10/22/2014	US-01D	Methylene Chloride	1.3	1.3	U	UG/L
10/22/2014	US-01D	Styrene	1.7	1.7	U	UG/L
10/22/2014	US-01D	Tetrachloroethene	2.1	2.1	U	UG/L
10/22/2014	US-01D	Toluene	1.6	1.6	U	UG/L
10/22/2014	US-01D	trans-1,2-Dichloroethene	1.9	1.9	U	UG/L
10/22/2014	US-01D	Trichloroethene	1.9	1.9	U	UG/L
10/22/2014	US-01D	Vinyl chloride	2.3	2.3	U	UG/L
10/22/2014	US-01D	Xylenes, Total	3	3	U	UG/L
10/22/2014	US-01D	Ethane	15	15	U	UG/L
10/22/2014	US-01D	Ethene	13	13	U	UG/L
10/22/2014	US-01D	Methane	8	8	U	UG/L
10/22/2014	US-01D	Alkalinity, Total	291	10		MG/L
10/22/2014	US-01D	Calcium and Magnesium Hardness, Dissolved	363000	500		UG/L
10/22/2014	US-01D	Total Dissolved Solids Field Filtered	482	5		MG/L
10/22/2014	US-01D	Orthophosphate	0.084	0.02		MG/L AS P
10/22/2014	US-01D	Sulfide	1	1	U	MG/L
10/22/2014	US-01D	Biochemical Oxygen Demand	2	2	U	MG/L
10/22/2014	US-01D	Total Organic Carbon	1.4	1		MG/L
10/22/2014	US02D	Fluoride, Dissolved	0.64	0.5		MG/L
10/22/2014	US02D	Ammonia	1.3	0.1		MG/L AS N
10/22/2014	US02D	Total Kjeldahl Nitrogen	1.3	0.15		MG/L AS N
10/22/2014	US02D	Nitrate, Dissolved	0.02	0.02	U	MG/L
10/22/2014	US02D	Nitrite	0.02	0.02	U	MG/L AS N
10/22/2014	US02D	Arsenic, Dissolved	10	10	U	UG/L
10/22/2014	US02D	Barium, Dissolved	200	200	U	UG/L
10/22/2014	US02D	Boron, Dissolved	304	100		UG/L

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Sample Date	Sample Point	Parameter	Result	Reporting Limit	Flags	UM
10/22/2014	US02D	Cadmium, Dissolved	5	5	U	UG/L
10/22/2014	US02D	Calcium, Dissolved	52000	5000		UG/L
10/22/2014	US02D	Chromium, Dissolved	10	10	U	UG/L
10/22/2014	US02D	Cobalt, Dissolved	10	10	U	UG/L
10/22/2014	US02D	Copper, Dissolved	10	10	U	UG/L
10/22/2014	US02D	Iron, Dissolved	738	100		UG/L
10/22/2014	US02D	Lead, Dissolved	3	3	U	UG/L
10/22/2014	US02D	Magnesium, Dissolved	37100	5000		UG/L
10/22/2014	US02D	Manganese, Dissolved	39.4	5		UG/L
10/22/2014	US02D	Nickel, Dissolved	10	10	U	UG/L
10/22/2014	US02D	Silver, Dissolved	10	10	U	UG/L
10/22/2014	US02D	Zinc, Dissolved	20	20	U	UG/L
10/22/2014	US02D	Antimony, Dissolved	0.6	0.6	U	UG/L
10/22/2014	US02D	Beryllium, Dissolved	0.4	0.4	U	UG/L
10/22/2014	US02D	Selenium, Dissolved	5	5	U	UG/L
10/22/2014	US02D	Thallium, Dissolved	0.2	0.2	U	UG/L
10/22/2014	US02D	Mercury, Dissolved	0.2	0.2	U	UG/L
10/22/2014	US02D	Dissolved Cyanide	0.01	0.01	U	MG/L
10/22/2014	US02D	Chloride, Dissolved	21.5	1		MG/L
10/22/2014	US02D	Sulfate	34.8	7.5		MG/L
10/22/2014	US02D	Sulfate, Dissolved	39.1	3	B	MG/L
10/22/2014	US02D	Nitrogen, Nitrate	0.02	0.02		MG/L AS N
10/22/2014	US02D	1,1,1-Trichloroethane	2.1	2.1	U	UG/L
10/22/2014	US02D	1,1,2-Trichloroethane	1.9	1.9	U	UG/L
10/22/2014	US02D	1,1-Dichloroethene	2.5	2.5	U	UG/L
10/22/2014	US02D	1,2,4-Trichlorobenzene	1	1	U	UG/L
10/22/2014	US02D	1,2-Dibromo-3-Chloropropane	5	5	U	UG/L
10/22/2014	US02D	1,2-Dibromoethane	2	2	U	UG/L
10/22/2014	US02D	1,2-Dichloroethane	1	1	U	UG/L
10/22/2014	US02D	1,2-Dichloropropane	1.7	1.7	U	UG/L
10/22/2014	US02D	Benzene	1.6	1.6	U	UG/L
10/22/2014	US02D	Carbon tetrachloride	2	2	U	UG/L
10/22/2014	US02D	Chlorobenzene	1.6	1.6	U	UG/L
10/22/2014	US02D	Chloroethane	2.5	2.5	U	UG/L
10/22/2014	US02D	cis-1,2-Dichloroethene	1.8	1.8	U	UG/L
10/22/2014	US02D	Ethylbenzene	1.6	1.6	U	UG/L
10/22/2014	US02D	Methylene Chloride	1.3	1.3	U	UG/L
10/22/2014	US02D	Styrene	1.7	1.7	U	UG/L
10/22/2014	US02D	Tetrachloroethene	2.1	2.1	U	UG/L
10/22/2014	US02D	Toluene	1.6	1.6	U	UG/L
10/22/2014	US02D	trans-1,2-Dichloroethene	1.9	1.9	U	UG/L
10/22/2014	US02D	Trichloroethene	1.9	1.9	U	UG/L
10/22/2014	US02D	Vinyl chloride	2.3	2.3	U	UG/L
10/22/2014	US02D	Xylenes, Total	3	3	U	UG/L
10/22/2014	US02D	Ethane	15	15	U	UG/L
10/22/2014	US02D	Ethene	13	13	U	UG/L
10/22/2014	US02D	Methane	8	8	U	UG/L
10/22/2014	US02D	Alkalinity, Total	314	10		MG/L
10/22/2014	US02D	Calcium and Magnesium Hardness, Dissolved	283000	500		UG/L
10/22/2014	US02D	Total Dissolved Solids Field Filtered	329	5	B*	MG/L
10/22/2014	US02D	Orthophosphate	0.42	0.03		MG/L AS P

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Sample Date	Sample Point	Parameter	Result	Reporting Limit	Flags	UM
10/22/2014	US02D	Sulfide	1	1	U	MG/L
10/22/2014	US02D	Biochemical Oxygen Demand	2	2	U	MG/L
10/22/2014	US02D	Total Organic Carbon	1.4	1		MG/L
10/22/2014	US-03D	Fluoride, Dissolved	0.5	0.5	U	MG/L
10/22/2014	US-03D	Ammonia	0.42	0.1		MG/L AS N
10/22/2014	US-03D	Total Kjeldahl Nitrogen	0.65	0.15		MG/L AS N
10/22/2014	US-03D	Nitrate, Dissolved	0.02	0.02	U	MG/L
10/22/2014	US-03D	Nitrite	0.02	0.02	U	MG/L AS N
10/22/2014	US-03D	Arsenic, Dissolved	10	10	U	UG/L
10/22/2014	US-03D	Barium, Dissolved	200	200	U	UG/L
10/22/2014	US-03D	Boron, Dissolved	105	100		UG/L
10/22/2014	US-03D	Cadmium, Dissolved	5	5	U	UG/L
10/22/2014	US-03D	Calcium, Dissolved	109000	5000		UG/L
10/22/2014	US-03D	Chromium, Dissolved	10	10	U	UG/L
10/22/2014	US-03D	Cobalt, Dissolved	10	10	U	UG/L
10/22/2014	US-03D	Copper, Dissolved	10	10	U	UG/L
10/22/2014	US-03D	Iron, Dissolved	3110	100		UG/L
10/22/2014	US-03D	Lead, Dissolved	3.9	3		UG/L
10/22/2014	US-03D	Magnesium, Dissolved	59100	5000		UG/L
10/22/2014	US-03D	Manganese, Dissolved	38.2	5		UG/L
10/22/2014	US-03D	Nickel, Dissolved	10	10	U	UG/L
10/22/2014	US-03D	Silver, Dissolved	10	10	U	UG/L
10/22/2014	US-03D	Zinc, Dissolved	20	20	U	UG/L
10/22/2014	US-03D	Antimony, Dissolved	0.6	0.6	U	UG/L
10/22/2014	US-03D	Beryllium, Dissolved	0.4	0.4	U	UG/L
10/22/2014	US-03D	Selenium, Dissolved	5	5	U	UG/L
10/22/2014	US-03D	Thallium, Dissolved	0.2	0.2	U	UG/L
10/22/2014	US-03D	Mercury, Dissolved	0.2	0.2	U	UG/L
10/22/2014	US-03D	Dissolved Cyanide	0.01	0.01	U	MG/L
10/22/2014	US-03D	Chloride, Dissolved	255	3.4		MG/L
10/22/2014	US-03D	Sulfate	60.1	7.5		MG/L
10/22/2014	US-03D	Sulfate, Dissolved	61.4	3		MG/L
10/22/2014	US-03D	Nitrogen, Nitrate	0.02	0.02	U	MG/L AS N
10/22/2014	US-03D	1,1,1-Trichloroethane	4.2	4.2	U	UG/L
10/22/2014	US-03D	1,1,2-Trichloroethane	3.8	3.8	U	UG/L
10/22/2014	US-03D	1,1-Dichloroethene	5	5	U	UG/L
10/22/2014	US-03D	1,2,4-Trichlorobenzene	1.1	1.1	U	UG/L
10/22/2014	US-03D	1,2-Dibromo-3-Chloropropane	10	10	U	UG/L
10/22/2014	US-03D	1,2-Dibromoethane	4	4	U	UG/L
10/22/2014	US-03D	1,2-Dichloroethane	1.7	1.7	U	UG/L
10/22/2014	US-03D	1,2-Dichloropropane	3.4	3.4	U	UG/L
10/22/2014	US-03D	Benzene	3.2	3.2	U	UG/L
10/22/2014	US-03D	Carbon tetrachloride	4	4	U	UG/L
10/22/2014	US-03D	Chlorobenzene	3.2	3.2	U	UG/L
10/22/2014	US-03D	Chloroethane	5	5	U	UG/L
10/22/2014	US-03D	cis-1,2-Dichloroethene	260	3.6		UG/L
10/22/2014	US-03D	Ethylbenzene	3.2	3.2	U	UG/L
10/22/2014	US-03D	Methylene Chloride	2.6	2.6	U	UG/L
10/22/2014	US-03D	Styrene	3.4	3.4	U	UG/L
10/22/2014	US-03D	Tetrachloroethene	4.2	4.2	U	UG/L
10/22/2014	US-03D	Toluene	3.2	3.2	U	UG/L

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Sample Date	Sample Point	Parameter	Result	Reporting Limit	Flags	UM
10/22/2014	US-03D	trans-1,2-Dichloroethene	48	3.8		UG/L
10/22/2014	US-03D	Trichloroethene	3.8	3.8	U	UG/L
10/22/2014	US-03D	Vinyl chloride	40	4.6		UG/L
10/22/2014	US-03D	Xylenes, Total	3	3	U	UG/L
10/22/2014	US-03D	Ethane	15	15	U	UG/L
10/22/2014	US-03D	Ethene	13	13	U	UG/L
10/22/2014	US-03D	Methane	43	8		UG/L
10/22/2014	US-03D	Alkalinity, Total	397	10		MG/L
10/22/2014	US-03D	Calcium and Magnesium Hardness, Dissolved	515000	500		UG/L
10/22/2014	US-03D	Total Dissolved Solids Field Filtered	779	5		MG/L
10/22/2014	US-03D	Orthophosphate	0.07	0.02		MG/L AS P
10/22/2014	US-03D	Sulfide	1	1	U	MG/L
10/22/2014	US-03D	Biochemical Oxygen Demand	2	2	*	MG/L
10/22/2014	US-03D	Total Organic Carbon	1	1	U	MG/L
10/22/2014	US-04D	Fluoride, Dissolved	0.86	0.5		MG/L
10/22/2014	US-04D	Ammonia	0.81	0.1		MG/L AS N
10/22/2014	US-04D	Total Kjeldahl Nitrogen	0.76	0.15		MG/L AS N
10/22/2014	US-04D	Nitrate, Dissolved	0.02	0.02	U	MG/L
10/22/2014	US-04D	Nitrite	0.02	0.02	U	MG/L AS N
10/22/2014	US-04D	Arsenic, Dissolved	10	10	U	UG/L
10/22/2014	US-04D	Barium, Dissolved	200	200	U	UG/L
10/22/2014	US-04D	Boron, Dissolved	395	100		UG/L
10/22/2014	US-04D	Cadmium, Dissolved	5	5	U	UG/L
10/22/2014	US-04D	Calcium, Dissolved	31200	5000		UG/L
10/22/2014	US-04D	Chromium, Dissolved	10	10	U	UG/L
10/22/2014	US-04D	Cobalt, Dissolved	10	10	U	UG/L
10/22/2014	US-04D	Copper, Dissolved	10	10	U	UG/L
10/22/2014	US-04D	Iron, Dissolved	100	100	U	UG/L
10/22/2014	US-04D	Lead, Dissolved	3	3	U	UG/L
10/22/2014	US-04D	Magnesium, Dissolved	22300	5000		UG/L
10/22/2014	US-04D	Manganese, Dissolved	11.3	5		UG/L
10/22/2014	US-04D	Nickel, Dissolved	10	10	U	UG/L
10/22/2014	US-04D	Silver, Dissolved	10	10	U	UG/L
10/22/2014	US-04D	Zinc, Dissolved	20	20	U	UG/L
10/22/2014	US-04D	Antimony, Dissolved	0.6	0.6	U	UG/L
10/22/2014	US-04D	Beryllium, Dissolved	0.4	0.4	U	UG/L
10/22/2014	US-04D	Selenium, Dissolved	5	5	U ^	UG/L
10/22/2014	US-04D	Thallium, Dissolved	0.2	0.2	U	UG/L
10/22/2014	US-04D	Mercury, Dissolved	0.2	0.2	U	UG/L
10/22/2014	US-04D	Dissolved Cyanide	0.01	0.01	U	MG/L
10/22/2014	US-04D	Chloride, Dissolved	15.6	1		MG/L
10/22/2014	US-04D	Sulfate	51.1	3		MG/L
10/22/2014	US-04D	Sulfate, Dissolved	51.3	7.5	B	MG/L
10/22/2014	US-04D	Nitrogen, Nitrate	0.02	0.02	U	MG/L AS N
10/22/2014	US-04D	1,1,1-Trichloroethane	2.1	2.1	U	UG/L
10/22/2014	US-04D	1,1,2-Trichloroethane	1.9	1.9	U	UG/L
10/22/2014	US-04D	1,1-Dichloroethene	2.5	2.5	U	UG/L
10/22/2014	US-04D	1,2,4-Trichlorobenzene	1	1	U	UG/L
10/22/2014	US-04D	1,2-Dibromo-3-Chloropropane	5	5	U	UG/L
10/22/2014	US-04D	1,2-Dibromoethane	2	2	U	UG/L
10/22/2014	US-04D	1,2-Dichloroethane	1	1	U	UG/L

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Sample Date	Sample Point	Parameter	Result	Reporting Limit	Flags	UM
10/22/2014	US-04D	1,2-Dichloropropane	1.7	1.7	U	UG/L
10/22/2014	US-04D	Benzene	1.6	1.6	U	UG/L
10/22/2014	US-04D	Carbon tetrachloride	2	2	U	UG/L
10/22/2014	US-04D	Chlorobenzene	1.6	1.6	U	UG/L
10/22/2014	US-04D	Chloroethane	2.5	2.5	U	UG/L
10/22/2014	US-04D	cis-1,2-Dichloroethene	1.8	1.8	U	UG/L
10/22/2014	US-04D	Ethylbenzene	1.6	1.6	U	UG/L
10/22/2014	US-04D	Methylene Chloride	1.3	1.3	U	UG/L
10/22/2014	US-04D	Styrene	1.7	1.7	U	UG/L
10/22/2014	US-04D	Tetrachloroethene	2.1	2.1	U	UG/L
10/22/2014	US-04D	Toluene	1.6	1.6	U	UG/L
10/22/2014	US-04D	trans-1,2-Dichloroethene	1.9	1.9	U	UG/L
10/22/2014	US-04D	Trichloroethene	1.9	1.9	U	UG/L
10/22/2014	US-04D	Vinyl chloride	2.3	2.3	U	UG/L
10/22/2014	US-04D	Xylenes, Total	3	3	U	UG/L
10/22/2014	US-04D	Ethane	15	15	U	UG/L
10/22/2014	US-04D	Ethene	13	13	U	UG/L
10/22/2014	US-04D	Methane	8.8	8		UG/L
10/22/2014	US-04D	Alkalinity, Total	220	10		MG/L
10/22/2014	US-04D	Calcium and Magnesium Hardness, Dissolved	170000	500		UG/L
10/22/2014	US-04D	Total Dissolved Solids Field Filtered	291	5		MG/L
10/22/2014	US-04D	Orthophosphate	0.6	0.02		MG/L AS P
10/22/2014	US-04D	Sulfide	1	1	U	MG/L
10/22/2014	US-04D	Biochemical Oxygen Demand	2	2	U	MG/L
10/22/2014	US-04D	Total Organic Carbon	1.9	1		MG/L
10/23/2014	US-05D	Fluoride, Dissolved	1	0.5		MG/L
10/23/2014	US-05D	Ammonia	0.17	0.1		MG/L AS N
10/23/2014	US-05D	Total Kjeldahl Nitrogen	0.41	0.15	B	MG/L AS N
10/23/2014	US-05D	Nitrate, Dissolved	0.049	0.02		MG/L
10/23/2014	US-05D	Nitrite	0.02	0.02	U	MG/L AS N
10/23/2014	US-05D	Arsenic, Dissolved	10	10	U	UG/L
10/23/2014	US-05D	Barium, Dissolved	200	200	U	UG/L
10/23/2014	US-05D	Boron, Dissolved	504	100		UG/L
10/23/2014	US-05D	Cadmium, Dissolved	5	5	U	UG/L
10/23/2014	US-05D	Calcium, Dissolved	22500	5000		UG/L
10/23/2014	US-05D	Chromium, Dissolved	10	10	U	UG/L
10/23/2014	US-05D	Cobalt, Dissolved	10	10	U	UG/L
10/23/2014	US-05D	Copper, Dissolved	10	10	U	UG/L
10/23/2014	US-05D	Iron, Dissolved	100	100	U	UG/L
10/23/2014	US-05D	Lead, Dissolved	3	3	U	UG/L
10/23/2014	US-05D	Magnesium, Dissolved	20000	5000		UG/L
10/23/2014	US-05D	Manganese, Dissolved	5	5		UG/L
10/23/2014	US-05D	Nickel, Dissolved	10	10	U	UG/L
10/23/2014	US-05D	Silver, Dissolved	10	10	U	UG/L
10/23/2014	US-05D	Zinc, Dissolved	20	20	U	UG/L
10/23/2014	US-05D	Antimony, Dissolved	0.6	0.6	U	UG/L
10/23/2014	US-05D	Beryllium, Dissolved	0.4	0.4	U	UG/L
10/23/2014	US-05D	Selenium, Dissolved	5	5	U	UG/L
10/23/2014	US-05D	Thallium, Dissolved	0.2	0.2	U	UG/L
10/23/2014	US-05D	Mercury, Dissolved	0.2	0.2	U	UG/L
10/23/2014	US-05D	Dissolved Cyanide	0.01	0.01	U	MG/L

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Sample Date	Sample Point	Parameter	Result	Reporting Limit	Flags	UM
10/23/2014	US-05D	Chloride, Dissolved	2.3	1		MG/L
10/23/2014	US-05D	Sulfate	69.3	7.5		MG/L
10/23/2014	US-05D	Sulfate, Dissolved	69.2	7.5		MG/L
10/23/2014	US-05D	Nitrogen, Nitrate	0.044	0.02		MG/L AS N
10/23/2014	US-05D	1,1,1-Trichloroethane	2.1	2.1	U	UG/L
10/23/2014	US-05D	1,1,2-Trichloroethane	1.9	1.9	U	UG/L
10/23/2014	US-05D	1,1-Dichloroethene	2.5	2.5	U	UG/L
10/23/2014	US-05D	1,2,4-Trichlorobenzene	1	1	U	UG/L
10/23/2014	US-05D	1,2-Dibromo-3-Chloropropane	5	5	U	UG/L
10/23/2014	US-05D	1,2-Dibromoethane	2	2	U	UG/L
10/23/2014	US-05D	1,2-Dichloroethane	1	1	U	UG/L
10/23/2014	US-05D	1,2-Dichloropropane	1.7	1.7	U	UG/L
10/23/2014	US-05D	Benzene	1.6	1.6	U	UG/L
10/23/2014	US-05D	Carbon tetrachloride	2	2	U	UG/L
10/23/2014	US-05D	Chlorobenzene	1.6	1.6	U	UG/L
10/23/2014	US-05D	Chloroethane	2.5	2.5	U	UG/L
10/23/2014	US-05D	cis-1,2-Dichloroethene	1.8	1.8	U	UG/L
10/23/2014	US-05D	Ethylbenzene	1.6	1.6	U	UG/L
10/23/2014	US-05D	Methylene Chloride	1.3	1.3	U	UG/L
10/23/2014	US-05D	Styrene	1.7	1.7	U	UG/L
10/23/2014	US-05D	Tetrachloroethene	2.1	2.1	U	UG/L
10/23/2014	US-05D	Toluene	1.6	1.6	U	UG/L
10/23/2014	US-05D	trans-1,2-Dichloroethene	1.9	1.9	U	UG/L
10/23/2014	US-05D	Trichloroethene	1.9	1.9	U	UG/L
10/23/2014	US-05D	Vinyl chloride	2.3	2.3	U	UG/L
10/23/2014	US-05D	Xylenes, Total	3	3	U	UG/L
10/23/2014	US-05D	Ethane	15	15	U	UG/L
10/23/2014	US-05D	Ethene	13	13	U	UG/L
10/23/2014	US-05D	Methane	8	8	U	UG/L
10/23/2014	US-05D	Alkalinity, Total	202	10		MG/L
10/23/2014	US-05D	Calcium and Magnesium Hardness, Dissolved	138000	500		UG/L
10/23/2014	US-05D	Total Dissolved Solids Field Filtered	296	5		MG/L
10/23/2014	US-05D	Orthophosphate	0.053	0.02		MG/L AS P
10/23/2014	US-05D	Sulfide	1	1	U	MG/L
10/23/2014	US-05D	Biochemical Oxygen Demand	2	2	U	MG/L
10/23/2014	US-05D	Total Organic Carbon	1	1	U	MG/L
10/22/2014	US-06D	Fluoride, Dissolved	1	0.5		MG/L
10/22/2014	US-06D	Ammonia	0.92	0.1		MG/L AS N
10/22/2014	US-06D	Total Kjeldahl Nitrogen	1.2	0.15	B	MG/L AS N
10/22/2014	US-06D	Nitrate, Dissolved	0.02	0.02	U	MG/L
10/22/2014	US-06D	Nitrite	0.02	0.02	U	MG/L AS N
10/22/2014	US-06D	Arsenic, Dissolved	10	10	U	UG/L
10/22/2014	US-06D	Barium, Dissolved	220	200	U	UG/L
10/22/2014	US-06D	Boron, Dissolved	512	100		UG/L
10/22/2014	US-06D	Cadmium, Dissolved	5	5	U	UG/L
10/22/2014	US-06D	Calcium, Dissolved	31000	5000		UG/L
10/22/2014	US-06D	Chromium, Dissolved	10	10	U	UG/L
10/22/2014	US-06D	Cobalt, Dissolved	10	10	U	UG/L
10/22/2014	US-06D	Copper, Dissolved	10	10	U	UG/L
10/22/2014	US-06D	Iron, Dissolved	555	100		UG/L
10/22/2014	US-06D	Lead, Dissolved	3	3	U	UG/L

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Sample Date	Sample Point	Parameter	Result	Reporting Limit	Flags	UM
10/22/2014	US-06D	Magnesium, Dissolved	20500	5000		UG/L
10/22/2014	US-06D	Manganese, Dissolved	18.6	5		UG/L
10/22/2014	US-06D	Nickel, Dissolved	10	10	U	UG/L
10/22/2014	US-06D	Silver, Dissolved	10	10	U	UG/L
10/22/2014	US-06D	Zinc, Dissolved	20	20	U	UG/L
10/22/2014	US-06D	Antimony, Dissolved	0.6	0.6	U	UG/L
10/22/2014	US-06D	Beryllium, Dissolved	0.4	0.4	U	UG/L
10/22/2014	US-06D	Selenium, Dissolved	5	5	U	UG/L
10/22/2014	US-06D	Thallium, Dissolved	0.2	0.2	U	UG/L
10/22/2014	US-06D	Mercury, Dissolved	0.2	0.2	U	UG/L
10/22/2014	US-06D	Dissolved Cyanide	0.01	0.01	U	MG/L
10/22/2014	US-06D	Chloride, Dissolved	3.5	1		MG/L
10/22/2014	US-06D	Sulfate	118	7.5		MG/L
10/22/2014	US-06D	Sulfate, Dissolved	114	7.5		MG/L
10/22/2014	US-06D	Nitrogen, Nitrate	0.02	0.02	U	MG/L AS N
10/22/2014	US-06D	1,1,1-Trichloroethane	2.1	2.1	U	UG/L
10/22/2014	US-06D	1,1,2-Trichloroethane	1.9	1.9	U	UG/L
10/22/2014	US-06D	1,1-Dichloroethene	2.5	2.5	U	UG/L
10/22/2014	US-06D	1,2,4-Trichlorobenzene	1	1	U	UG/L
10/22/2014	US-06D	1,2-Dibromo-3-Chloropropane	5	5	U	UG/L
10/22/2014	US-06D	1,2-Dibromoethane	2	2	U	UG/L
10/22/2014	US-06D	1,2-Dichloroethane	1	1	U	UG/L
10/22/2014	US-06D	1,2-Dichloropropane	1.7	1.7	U	UG/L
10/22/2014	US-06D	Benzene	1.6	1.6	U	UG/L
10/22/2014	US-06D	Carbon tetrachloride	2	2	U	UG/L
10/22/2014	US-06D	Chlorobenzene	1.6	1.6	U	UG/L
10/22/2014	US-06D	Chloroethane	2.5	2.5	U	UG/L
10/22/2014	US-06D	cis-1,2-Dichloroethene	1.8	1.8	U	UG/L
10/22/2014	US-06D	Ethylbenzene	1.6	1.6	U	UG/L
10/22/2014	US-06D	Methylene Chloride	1.3	1.3	U	UG/L
10/22/2014	US-06D	Styrene	1.7	1.7	U	UG/L
10/22/2014	US-06D	Tetrachloroethene	2.1	2.1	U	UG/L
10/22/2014	US-06D	Toluene	1.6	1.6	U	UG/L
10/22/2014	US-06D	trans-1,2-Dichloroethene	1.9	1.9	U	UG/L
10/22/2014	US-06D	Trichloroethene	1.9	1.9	U	UG/L
10/22/2014	US-06D	Vinyl chloride	2.3	2.3	U	UG/L
10/22/2014	US-06D	Xylenes, Total	3	3	U	UG/L
10/22/2014	US-06D	Ethane	15	15	U	UG/L
10/22/2014	US-06D	Ethene	13	13	U	UG/L
10/22/2014	US-06D	Methane	8	8	U	UG/L
10/22/2014	US-06D	Alkalinity, Total	173	10		MG/L
10/22/2014	US-06D	Calcium and Magnesium Hardness, Dissolved	162000	500		UG/L
10/22/2014	US-06D	Total Dissolved Solids Field Filtered	337	5		MG/L
10/22/2014	US-06D	Orthophosphate	0.22	0.02		MG/L AS P
10/22/2014	US-06D	Sulfide	1	1	U	MG/L
10/22/2014	US-06D	Biochemical Oxygen Demand	2	2	U	MG/L
10/22/2014	US-06D	Total Organic Carbon	1.6	1		MG/L
10/21/2014	W-03D	Fluoride, Dissolved	0.5	0.5	U	MG/L
10/21/2014	W-03D	Ammonia	0.14	0.1		MG/L AS N
10/21/2014	W-03D	Total Kjeldahl Nitrogen	0.15	0.15	B	MG/L AS N
10/21/2014	W-03D	Nitrate, Dissolved	0.025	0.02		MG/L

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Sample Date	Sample Point	Parameter	Result	Reporting Limit	Flags	UM
10/21/2014	W-03D	Nitrite	0.02	0.02	U	MG/L AS N
10/21/2014	W-03D	Arsenic, Dissolved	10	10	U	UG/L
10/21/2014	W-03D	Barium, Dissolved	200	200	U	UG/L
10/21/2014	W-03D	Boron, Dissolved	100	100	U	UG/L
10/21/2014	W-03D	Cadmium, Dissolved	5	5	U	UG/L
10/21/2014	W-03D	Calcium, Dissolved	88500	5000		UG/L
10/21/2014	W-03D	Chromium, Dissolved	10	10	U	UG/L
10/21/2014	W-03D	Cobalt, Dissolved	10	10	U	UG/L
10/21/2014	W-03D	Copper, Dissolved	10	10	U	UG/L
10/21/2014	W-03D	Iron, Dissolved	1500	100		UG/L
10/21/2014	W-03D	Lead, Dissolved	3	3	U	UG/L
10/21/2014	W-03D	Magnesium, Dissolved	55600	5000		UG/L
10/21/2014	W-03D	Manganese, Dissolved	61.5	5		UG/L
10/21/2014	W-03D	Nickel, Dissolved	10	10	U	UG/L
10/21/2014	W-03D	Silver, Dissolved	10	10	U	UG/L
10/21/2014	W-03D	Zinc, Dissolved	20	20	U	UG/L
10/21/2014	W-03D	Antimony, Dissolved	0.6	0.6	U	UG/L
10/21/2014	W-03D	Beryllium, Dissolved	0.4	0.4	U	UG/L
10/21/2014	W-03D	Selenium, Dissolved	5	5	U	UG/L
10/21/2014	W-03D	Thallium, Dissolved	0.2	0.2	U	UG/L
10/21/2014	W-03D	Mercury, Dissolved	0.2	0.2	U	UG/L
10/21/2014	W-03D	Dissolved Cyanide	0.01	0.01	U	MG/L
10/21/2014	W-03D	Chloride, Dissolved	95.5	1.7		MG/L
10/21/2014	W-03D	Sulfate	78.7	7.5		MG/L
10/21/2014	W-03D	Sulfate, Dissolved	77.3	7.5		MG/L
10/21/2014	W-03D	Nitrogen, Nitrate	0.02	0.02	U	MG/L AS N
10/21/2014	W-03D	1,1,1-Trichloroethane	2.1	2.1	U	UG/L
10/21/2014	W-03D	1,1,2-Trichloroethane	1.9	1.9	U	UG/L
10/21/2014	W-03D	1,1-Dichloroethene	2.5	2.5	U	UG/L
10/21/2014	W-03D	1,2,4-Trichlorobenzene	1	1	U	UG/L
10/21/2014	W-03D	1,2-Dibromo-3-Chloropropane	5	5	U	UG/L
10/21/2014	W-03D	1,2-Dibromoethane	2	2	U	UG/L
10/21/2014	W-03D	1,2-Dichloroethane	1	1	U	UG/L
10/21/2014	W-03D	1,2-Dichloropropane	1.7	1.7	U	UG/L
10/21/2014	W-03D	Benzene	1.6	1.6	U	UG/L
10/21/2014	W-03D	Carbon tetrachloride	2	2	U	UG/L
10/21/2014	W-03D	Chlorobenzene	1.6	1.6	U	UG/L
10/21/2014	W-03D	Chloroethane	2.5	2.5	U	UG/L
10/21/2014	W-03D	cis-1,2-Dichloroethene	1.8	1.8	U	UG/L
10/21/2014	W-03D	Ethylbenzene	1.6	1.6	U	UG/L
10/21/2014	W-03D	Methylene Chloride	1.3	1.3	U	UG/L
10/21/2014	W-03D	Styrene	1.7	1.7	U	UG/L
10/21/2014	W-03D	Tetrachloroethene	2.1	2.1	U	UG/L
10/21/2014	W-03D	Toluene	1.6	1.6	U	UG/L
10/21/2014	W-03D	trans-1,2-Dichloroethene	1.9	1.9	U	UG/L
10/21/2014	W-03D	Trichloroethene	1.9	1.9	U	UG/L
10/21/2014	W-03D	Vinyl chloride	2.3	2.3	U	UG/L
10/21/2014	W-03D	Xylenes, Total	3	3	U	UG/L
10/21/2014	W-03D	Ethane	15	15	U	UG/L
10/21/2014	W-03D	Ethene	13	13	U	UG/L
10/21/2014	W-03D	Methane	72	8		UG/L

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Sample Date	Sample Point	Parameter	Result	Reporting Limit	Flags	UM
10/21/2014	W-03D	Alkalinity, Total	345	10		MG/L
10/21/2014	W-03D	Calcium and Magnesium Hardness, Dissolved	450000	500		UG/L
10/21/2014	W-03D	Total Dissolved Solids Field Filtered	588	5		MG/L
10/21/2014	W-03D	Orthophosphate	0.13	0.02		MG/L AS P
10/21/2014	W-03D	Sulfide	1	1	U	MG/L
10/21/2014	W-03D	Biochemical Oxygen Demand	2	2	U	MG/L
10/21/2014	W-03D	Total Organic Carbon	1.3	1		MG/L
10/21/2014	W-08D	Fluoride, Dissolved	0.5	0.5	U	MG/L
10/21/2014	W-08D	Ammonia	0.48	0.1		MG/L AS N
10/21/2014	W-08D	Total Kjeldahl Nitrogen	0.8	0.15		MG/L AS N
10/21/2014	W-08D	Nitrate, Dissolved	0.02	0.02	U	MG/L
10/21/2014	W-08D	Nitrite	0.02	0.02	U	MG/L AS N
10/21/2014	W-08D	Arsenic, Dissolved	10	10	U	UG/L
10/21/2014	W-08D	Barium, Dissolved	200	200	U	UG/L
10/21/2014	W-08D	Boron, Dissolved	165	100		UG/L
10/21/2014	W-08D	Cadmium, Dissolved	5	5	U	UG/L
10/21/2014	W-08D	Calcium, Dissolved	87800	5000		UG/L
10/21/2014	W-08D	Chromium, Dissolved	10	10	U	UG/L
10/21/2014	W-08D	Cobalt, Dissolved	10	10	U	UG/L
10/21/2014	W-08D	Copper, Dissolved	10	10	U	UG/L
10/21/2014	W-08D	Iron, Dissolved	3410	100		UG/L
10/21/2014	W-08D	Lead, Dissolved	4	3	U ^	UG/L
10/21/2014	W-08D	Magnesium, Dissolved	40100	5000		UG/L
10/21/2014	W-08D	Manganese, Dissolved	170	5		UG/L
10/21/2014	W-08D	Nickel, Dissolved	10	10	U	UG/L
10/21/2014	W-08D	Silver, Dissolved	10	10	U	UG/L
10/21/2014	W-08D	Zinc, Dissolved	20	20	U	UG/L
10/21/2014	W-08D	Antimony, Dissolved	0.6	0.6	U	UG/L
10/21/2014	W-08D	Beryllium, Dissolved	0.4	0.4	U	UG/L
10/21/2014	W-08D	Selenium, Dissolved	5	5	U ^	UG/L
10/21/2014	W-08D	Thallium, Dissolved	0.2	0.2	U	UG/L
10/21/2014	W-08D	Mercury, Dissolved	0.2	0.2	U	UG/L
10/21/2014	W-08D	Dissolved Cyanide	0.01	0.01	U	MG/L
10/21/2014	W-08D	Chloride, Dissolved	81.7	1.7		MG/L
10/21/2014	W-08D	Sulfate	2.6	1.5		MG/L
10/21/2014	W-08D	Sulfate, Dissolved	4.2	1.5		MG/L
10/21/2014	W-08D	Nitrogen, Nitrate	0.02	0.02	U	MG/L AS N
10/21/2014	W-08D	1,1,1-Trichloroethane	2.1	2.1	U	UG/L
10/21/2014	W-08D	1,1,2-Trichloroethane	1.9	1.9	U	UG/L
10/21/2014	W-08D	1,1-Dichloroethene	2.5	2.5	U	UG/L
10/21/2014	W-08D	1,2,4-Trichlorobenzene	1	1	U	UG/L
10/21/2014	W-08D	1,2-Dibromo-3-Chloropropane	5	5	U	UG/L
10/21/2014	W-08D	1,2-Dibromoethane	2	2	U	UG/L
10/21/2014	W-08D	1,2-Dichloroethane	1	1	U	UG/L
10/21/2014	W-08D	1,2-Dichloropropane	1.7	1.7	U	UG/L
10/21/2014	W-08D	Benzene	1.6	1.6	U	UG/L
10/21/2014	W-08D	Carbon tetrachloride	2	2	U	UG/L
10/21/2014	W-08D	Chlorobenzene	1.6	1.6	U	UG/L
10/21/2014	W-08D	Chloroethane	2.5	2.5	U	UG/L
10/21/2014	W-08D	cis-1,2-Dichloroethene	1.8	1.8	U	UG/L
10/21/2014	W-08D	Ethylbenzene	1.6	1.6	U	UG/L

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Sample Date	Sample Point	Parameter	Result	Reporting Limit	Flags	UM
10/21/2014	W-08D	Methylene Chloride	1.3	1.3	U	UG/L
10/21/2014	W-08D	Styrene	1.7	1.7	U	UG/L
10/21/2014	W-08D	Tetrachloroethene	2.1	2.1	U	UG/L
10/21/2014	W-08D	Toluene	1.6	1.6	U	UG/L
10/21/2014	W-08D	trans-1,2-Dichloroethene	1.9	1.9	U	UG/L
10/21/2014	W-08D	Trichloroethene	1.9	1.9	U	UG/L
10/21/2014	W-08D	Vinyl chloride	2.3	2.3	U	UG/L
10/21/2014	W-08D	Xylenes, Total	3	3	U	UG/L
10/21/2014	W-08D	Ethane	15	15	U	UG/L
10/21/2014	W-08D	Ethene	15	13	U	UG/L
10/21/2014	W-08D	Methane	650	10		UG/L
10/21/2014	W-08D	Alkalinity, Total	331	10		MG/L
10/21/2014	W-08D	Calcium and Magnesium Hardness, Dissolved	384000	500		UG/L
10/21/2014	W-08D	Total Dissolved Solids Field Filtered	538	5		MG/L
10/21/2014	W-08D	Orthophosphate	0.089	0.02		MG/L AS P
10/21/2014	W-08D	Sulfide	1	1	U	MG/L
10/21/2014	W-08D	Biochemical Oxygen Demand	2	2	U	MG/L
10/21/2014	W-08D	Total Organic Carbon	4.7	1		MG/L
10/21/2014	G-102	Fluoride, Dissolved	0.5	0.5	U	MG/L
10/21/2014	G-102	Nitrate, Dissolved	0.02	0.02	U	MG/L
10/21/2014	G-102	Arsenic, Dissolved	10	10	U	UG/L
10/21/2014	G-102	Barium, Dissolved	220	200		UG/L
10/21/2014	G-102	Boron, Dissolved	214	100		UG/L
10/21/2014	G-102	Cadmium, Dissolved	5	5	U	UG/L
10/21/2014	G-102	Calcium, Dissolved	125000	5000		UG/L
10/21/2014	G-102	Chromium, Dissolved	10	10	U	UG/L
10/21/2014	G-102	Cobalt, Dissolved	10	10	U	UG/L
10/21/2014	G-102	Copper, Dissolved	10	10	U	UG/L
10/21/2014	G-102	Iron, Dissolved	6810	100		UG/L
10/21/2014	G-102	Lead, Dissolved	3	3	U	UG/L
10/21/2014	G-102	Magnesium, Dissolved	55400	5000		UG/L
10/21/2014	G-102	Manganese, Dissolved	105	5		UG/L
10/21/2014	G-102	Nickel, Dissolved	10	10	U	UG/L
10/21/2014	G-102	Silver, Dissolved	10	10	U	UG/L
10/21/2014	G-102	Zinc, Dissolved	20	20	U	UG/L
10/21/2014	G-102	Antimony, Dissolved	0.6	0.6	U	UG/L
10/21/2014	G-102	Beryllium, Dissolved	0.4	0.4	U	UG/L
10/21/2014	G-102	Selenium, Dissolved	5	5	U	UG/L
10/21/2014	G-102	Thallium, Dissolved	0.2	0.2	U	UG/L
10/21/2014	G-102	Mercury, Dissolved	0.2	0.2	U	UG/L
10/21/2014	G-102	Dissolved Cyanide	0.01	0.01	U	MG/L
10/21/2014	G-102	Chloride, Dissolved	275	3.4		MG/L
10/21/2014	G-102	Sulfate, Dissolved	44.7	7.5		MG/L
10/21/2014	G-102	1,1,1-Trichloroethane	2.1	2.1	U	UG/L
10/21/2014	G-102	1,1,2-Trichloroethane	1.9	1.9	U	UG/L
10/21/2014	G-102	1,1-Dichloroethene	2.5	2.5	U	UG/L
10/21/2014	G-102	1,2,4-Trichlorobenzene	1	1	U	UG/L
10/21/2014	G-102	1,2-Dibromo-3-Chloropropane	5	5	U	UG/L
10/21/2014	G-102	1,2-Dibromoethane	2	2	U	UG/L
10/21/2014	G-102	1,2-Dichloroethane	1	1	U	UG/L
10/21/2014	G-102	1,2-Dichloropropane	1.7	1.7	U	UG/L

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Sample Date	Sample Point	Parameter	Result	Reporting Limit	Flags	UM
10/21/2014	G-102	Benzene	1.6	1.6	U	UG/L
10/21/2014	G-102	Carbon tetrachloride	2	2	U	UG/L
10/21/2014	G-102	Chlorobenzene	1.6	1.6	U	UG/L
10/21/2014	G-102	cis-1,2-Dichloroethene	1.8	1.8	U	UG/L
10/21/2014	G-102	Ethylbenzene	1.6	1.6	U	UG/L
10/21/2014	G-102	Methylene Chloride	1.3	1.3	U	UG/L
10/21/2014	G-102	Styrene	1.7	1.7	U	UG/L
10/21/2014	G-102	Tetrachloroethene	2.1	2.1	U	UG/L
10/21/2014	G-102	Toluene	1.6	1.6	U	UG/L
10/21/2014	G-102	trans-1,2-Dichloroethene	1.9	1.9	U	UG/L
10/21/2014	G-102	Trichloroethene	1.9	1.9	U	UG/L
10/21/2014	G-102	Vinyl chloride	2.3	2.3	U	UG/L
10/21/2014	G-102	Xylenes, Total	3	3	U	UG/L
10/21/2014	G-102	Calcium and Magnesium Hardness, Dissolved	541000	500		UG/L
10/21/2014	G-102	Total Dissolved Solids Field Filtered	960	5		MG/L
10/21/2014	PZ-03U	Fluoride, Dissolved		0.5	U	MG/L
10/21/2014	PZ-03U	Nitrate, Dissolved		0.02	U	MG/L
10/21/2014	PZ-03U	Arsenic, Dissolved	10	10	U	UG/L
10/21/2014	PZ-03U	Barium, Dissolved	200	200	U	UG/L
10/21/2014	PZ-03U	Boron, Dissolved	100	100	U	UG/L
10/21/2014	PZ-03U	Cadmium, Dissolved	5	5	U	UG/L
10/21/2014	PZ-03U	Calcium, Dissolved	113000	5000		UG/L
10/21/2014	PZ-03U	Chromium, Dissolved	10	10	U	UG/L
10/21/2014	PZ-03U	Cobalt, Dissolved	10	10	U	UG/L
10/21/2014	PZ-03U	Copper, Dissolved	10	10	U	UG/L
10/21/2014	PZ-03U	Iron, Dissolved	4650	100		UG/L
10/21/2014	PZ-03U	Lead, Dissolved	3	3	U	UG/L
10/21/2014	PZ-03U	Magnesium, Dissolved	49100	5000		UG/L
10/21/2014	PZ-03U	Manganese, Dissolved	110	5		UG/L
10/21/2014	PZ-03U	Nickel, Dissolved	10	10	U	UG/L
10/21/2014	PZ-03U	Silver, Dissolved	10	10	U	UG/L
10/21/2014	PZ-03U	Zinc, Dissolved	20	20	U	UG/L
10/21/2014	PZ-03U	Antimony, Dissolved	0.6	0.6	U	UG/L
10/21/2014	PZ-03U	Beryllium, Dissolved	0.4	0.4	U	UG/L
10/21/2014	PZ-03U	Selenium, Dissolved	5	5	U	UG/L
10/21/2014	PZ-03U	Thallium, Dissolved	0.2	0.2	U	UG/L
10/21/2014	PZ-03U	Mercury, Dissolved	0.2	0.2	U	UG/L
10/21/2014	PZ-03U	Dissolved Cyanide	0.01	0.01	U	MG/L
10/21/2014	PZ-03U	Chloride, Dissolved	136	1.7		MG/L
10/21/2014	PZ-03U	Sulfate, Dissolved	1.5	1.5	U	MG/L
10/21/2014	PZ-03U	1,1,1-Trichloroethane	2.1	2.1	U	UG/L
10/21/2014	PZ-03U	1,1,2-Trichloroethane	1.9	1.9	U	UG/L
10/21/2014	PZ-03U	1,1-Dichloroethene	2.5	2.5	U	UG/L
10/21/2014	PZ-03U	1,2,4-Trichlorobenzene	1	1	U	UG/L
10/21/2014	PZ-03U	1,2-Dibromo-3-Chloropropane	5	5	U	UG/L
10/21/2014	PZ-03U	1,2-Dibromoethane	2	2	U	UG/L
10/21/2014	PZ-03U	1,2-Dichloroethane	1	1	U	UG/L
10/21/2014	PZ-03U	1,2-Dichloropropane	1.7	1.7	U	UG/L
10/21/2014	PZ-03U	Benzene	1.6	1.6	U	UG/L
10/21/2014	PZ-03U	Carbon tetrachloride	2	2	U	UG/L
10/21/2014	PZ-03U	Chlorobenzene	1.6	1.6	U	UG/L

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Sample Date	Sample Point	Parameter	Result	Reporting Limit	Flags	UM
10/21/2014	PZ-03U	cis-1,2-Dichloroethene	1.8	1.8	U	UG/L
10/21/2014	PZ-03U	Ethylbenzene	1.6	1.6	U	UG/L
10/21/2014	PZ-03U	Methylene Chloride	1.3	1.3	U	UG/L
10/21/2014	PZ-03U	Styrene	1.7	1.7	U	UG/L
10/21/2014	PZ-03U	Tetrachloroethene	2.1	2.1	U	UG/L
10/21/2014	PZ-03U	Toluene	1.6	1.6	U	UG/L
10/21/2014	PZ-03U	trans-1,2-Dichloroethene	1.9	1.9	U	UG/L
10/21/2014	PZ-03U	Trichloroethene	1.9	1.9	U	UG/L
10/21/2014	PZ-03U	Vinyl chloride	2.3	2.3	U	UG/L
10/21/2014	PZ-03U	Xylenes, Total	3	3	U	UG/L
10/21/2014	PZ-03U	Calcium and Magnesium Hardness, Dissolved	483000	500		UG/L
10/21/2014	PZ-03U	Total Dissolved Solids Field Filtered	697	5		MG/L
10/21/2014	PZ-04U	Fluoride, Dissolved	0.5	0.5	U	MG/L
10/21/2014	PZ-04U	Nitrate, Dissolved	0.02	0.02		MG/L
10/21/2014	PZ-04U	Arsenic, Dissolved	10	10	U	UG/L
10/21/2014	PZ-04U	Barium, Dissolved	200	200	U	UG/L
10/21/2014	PZ-04U	Boron, Dissolved	100	100	U	UG/L
10/21/2014	PZ-04U	Cadmium, Dissolved	5	5	U	UG/L
10/21/2014	PZ-04U	Calcium, Dissolved	85600	5000		UG/L
10/21/2014	PZ-04U	Chromium, Dissolved	10	10	U	UG/L
10/21/2014	PZ-04U	Cobalt, Dissolved	10	10	U	UG/L
10/21/2014	PZ-04U	Copper, Dissolved	10	10	U	UG/L
10/21/2014	PZ-04U	Iron, Dissolved	2290	100		UG/L
10/21/2014	PZ-04U	Lead, Dissolved	3	3	U	UG/L
10/21/2014	PZ-04U	Magnesium, Dissolved	45600	5000		UG/L
10/21/2014	PZ-04U	Manganese, Dissolved	159	5		UG/L
10/21/2014	PZ-04U	Nickel, Dissolved	10	10	U	UG/L
10/21/2014	PZ-04U	Silver, Dissolved	10	10	U	UG/L
10/21/2014	PZ-04U	Zinc, Dissolved	20	20	U	UG/L
10/21/2014	PZ-04U	Antimony, Dissolved	0.6	0.6	U	UG/L
10/21/2014	PZ-04U	Beryllium, Dissolved	0.4	0.4	U	UG/L
10/21/2014	PZ-04U	Selenium, Dissolved	5	5	U	UG/L
10/21/2014	PZ-04U	Thallium, Dissolved	0.2	0.2	U	UG/L
10/21/2014	PZ-04U	Mercury, Dissolved	0.2	0.2	U	UG/L
10/21/2014	PZ-04U	Dissolved Cyanide	0.01	0.01	U	MG/L
10/21/2014	PZ-04U	Chloride, Dissolved	117	1.7		MG/L
10/21/2014	PZ-04U	Sulfate, Dissolved	1.5	1.5	U	MG/L
10/21/2014	PZ-04U	1,1,1-Trichloroethane	2.1	2.1	U	UG/L
10/21/2014	PZ-04U	1,1,2-Trichloroethane	1.9	1.9	U	UG/L
10/21/2014	PZ-04U	1,1-Dichloroethene	2.5	2.5	U	UG/L
10/21/2014	PZ-04U	1,2,4-Trichlorobenzene	1	1	U	UG/L
10/21/2014	PZ-04U	1,2-Dibromo-3-Chloropropane	5	5	U	UG/L
10/21/2014	PZ-04U	1,2-Dibromoethane	2	2	U	UG/L
10/21/2014	PZ-04U	1,2-Dichloroethane	1	1	U	UG/L
10/21/2014	PZ-04U	1,2-Dichloropropane	1.7	1.7	U	UG/L
10/21/2014	PZ-04U	Benzene	1.6	1.6	U	UG/L
10/21/2014	PZ-04U	Carbon tetrachloride	2	2	U	UG/L
10/21/2014	PZ-04U	Chlorobenzene	1.6	1.6	U	UG/L
10/21/2014	PZ-04U	cis-1,2-Dichloroethene	1.8	1.8	U	UG/L
10/21/2014	PZ-04U	Ethylbenzene	1.6	1.6	U	UG/L
10/21/2014	PZ-04U	Methylene Chloride	1.3	1.3	U	UG/L

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Sample Date	Sample Point	Parameter	Result	Reporting Limit	Flags	UM
10/21/2014	PZ-04U	Styrene	1.7	1.7	U	UG/L
10/21/2014	PZ-04U	Tetrachloroethene	2.1	2.1	U	UG/L
10/21/2014	PZ-04U	Toluene	1.6	1.6	U	UG/L
10/21/2014	PZ-04U	trans-1,2-Dichloroethene	1.9	1.9	U	UG/L
10/21/2014	PZ-04U	Trichloroethene	1.9	1.9	U	UG/L
10/21/2014	PZ-04U	Vinyl chloride	2.3	2.3	U	UG/L
10/21/2014	PZ-04U	Xylenes, Total	3	3	U	UG/L
10/21/2014	PZ-04U	Calcium and Magnesium Hardness, Dissolved	402000	500		UG/L
10/21/2014	PZ-04U	Total Dissolved Solids Field Filtered	601	5		MG/L
10/23/2014	US-04S	Fluoride, Dissolved	0.5	0.5	U	MG/L
10/23/2014	US-04S	Nitrate, Dissolved	0.02	0.02		MG/L
10/23/2014	US-04S	Arsenic, Dissolved	10	10	U	UG/L
10/23/2014	US-04S	Barium, Dissolved	200	200	U	UG/L
10/23/2014	US-04S	Boron, Dissolved	192	100		UG/L
10/23/2014	US-04S	Cadmium, Dissolved	5	5	U	UG/L
10/23/2014	US-04S	Calcium, Dissolved	118000	5000		UG/L
10/23/2014	US-04S	Chromium, Dissolved	10	10	U	UG/L
10/23/2014	US-04S	Cobalt, Dissolved	10	10	U	UG/L
10/23/2014	US-04S	Copper, Dissolved	10	10	U	UG/L
10/23/2014	US-04S	Iron, Dissolved	3340	100		UG/L
10/23/2014	US-04S	Lead, Dissolved	3.2	3		UG/L
10/23/2014	US-04S	Magnesium, Dissolved	53200	5000		UG/L
10/23/2014	US-04S	Manganese, Dissolved	90.8	5		UG/L
10/23/2014	US-04S	Nickel, Dissolved	10.7	10		UG/L
10/23/2014	US-04S	Silver, Dissolved	10	10	U	UG/L
10/23/2014	US-04S	Zinc, Dissolved	20	20	U	UG/L
10/23/2014	US-04S	Antimony, Dissolved	0.6	0.6	U ^	UG/L
10/23/2014	US-04S	Beryllium, Dissolved	0.4	0.4	U	UG/L
10/23/2014	US-04S	Selenium, Dissolved	5	5	U	UG/L
10/23/2014	US-04S	Thallium, Dissolved	0.2	0.2	U	UG/L
10/23/2014	US-04S	Mercury, Dissolved	0.2	0.2	U	UG/L
10/23/2014	US-04S	Dissolved Cyanide	0.01	0.01	U	MG/L
10/23/2014	US-04S	Chloride, Dissolved	283	3.4		MG/L
10/23/2014	US-04S	Sulfate, Dissolved	43.1	7.5		MG/L
10/23/2014	US-04S	1,1,1-Trichloroethane	2.1	2.1	U	UG/L
10/23/2014	US-04S	1,1,2-Trichloroethane	1.9	1.9	U	UG/L
10/23/2014	US-04S	1,1-Dichloroethene	2.5	2.5	U	UG/L
10/23/2014	US-04S	1,2,4-Trichlorobenzene	1	1	U	UG/L
10/23/2014	US-04S	1,2-Dibromo-3-Chloropropane	5	5	U	UG/L
10/23/2014	US-04S	1,2-Dibromoethane	2	2	U	UG/L
10/23/2014	US-04S	1,2-Dichloroethane	1	1	U	UG/L
10/23/2014	US-04S	1,2-Dichloropropane	1.7	1.7	U	UG/L
10/23/2014	US-04S	Benzene	1.6	1.6	U	UG/L
10/23/2014	US-04S	Carbon tetrachloride	2	2	U	UG/L
10/23/2014	US-04S	Chlorobenzene	1.6	1.6	U	UG/L
10/23/2014	US-04S	cis-1,2-Dichloroethene	24	1.8		UG/L
10/23/2014	US-04S	Ethylbenzene	1.6	1.6	U	UG/L
10/23/2014	US-04S	Methylene Chloride	1.3	1.3	U	UG/L
10/23/2014	US-04S	Styrene	1.7	1.7	U	UG/L
10/23/2014	US-04S	Tetrachloroethene	2.1	2.1	U	UG/L
10/23/2014	US-04S	Toluene	1.6	1.6	U	UG/L

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Sample Date	Sample Point	Parameter	Result	Reporting Limit	Flags	UM
10/23/2014	US-04S	trans-1,2-Dichloroethene	2.1	1.9		UG/L
10/23/2014	US-04S	Trichloroethene	1.9	1.9	U	UG/L
10/23/2014	US-04S	Vinyl chloride	2.3	2.3	U	UG/L
10/23/2014	US-04S	Xylenes, Total	3	3	U	UG/L
10/23/2014	US-04S	Calcium and Magnesium Hardness, Dissolved	514000	500		UG/L
10/23/2014	US-04S	Total Dissolved Solids Field Filtered	929	5		MG/L
10/22/2014	US-06S	Fluoride, Dissolved	0.5	0.5	U	MG/L
10/22/2014	US-06S	Nitrate, Dissolved	0.02	0.02	U	MG/L
10/22/2014	US-06S	Arsenic, Dissolved	10	10	U	UG/L
10/22/2014	US-06S	Barium, Dissolved	200	200	U	UG/L
10/22/2014	US-06S	Boron, Dissolved	100	100	U	UG/L
10/22/2014	US-06S	Cadmium, Dissolved	5	5	U	UG/L
10/22/2014	US-06S	Calcium, Dissolved	115000	5000		UG/L
10/22/2014	US-06S	Chromium, Dissolved	10	10	U	UG/L
10/22/2014	US-06S	Cobalt, Dissolved	10	10	U	UG/L
10/22/2014	US-06S	Copper, Dissolved	10	10	U	UG/L
10/22/2014	US-06S	Iron, Dissolved	4000	100		UG/L
10/22/2014	US-06S	Lead, Dissolved	3.1	3		UG/L
10/22/2014	US-06S	Magnesium, Dissolved	56700	5000		UG/L
10/22/2014	US-06S	Manganese, Dissolved	90.2	5		UG/L
10/22/2014	US-06S	Nickel, Dissolved	10	10	U	UG/L
10/22/2014	US-06S	Silver, Dissolved	10	10	U	UG/L
10/22/2014	US-06S	Zinc, Dissolved	20	20	U	UG/L
10/22/2014	US-06S	Antimony, Dissolved	0.6	0.6	U	UG/L
10/22/2014	US-06S	Beryllium, Dissolved	0.4	0.4	U	UG/L
10/22/2014	US-06S	Selenium, Dissolved	5	5	U	UG/L
10/22/2014	US-06S	Thallium, Dissolved	0.2	0.2	U	UG/L
10/22/2014	US-06S	Mercury, Dissolved	0.2	0.2	U	UG/L
10/22/2014	US-06S	Dissolved Cyanide	0.01	0.01	U	MG/L
10/22/2014	US-06S	Chloride, Dissolved	107	1.7		MG/L
10/22/2014	US-06S	Sulfate, Dissolved	1.9	1.5		MG/L
10/22/2014	US-06S	1,1,1-Trichloroethane	2.1	2.1	U	UG/L
10/22/2014	US-06S	1,1,2-Trichloroethane	1.9	1.9	U	UG/L
10/22/2014	US-06S	1,1-Dichloroethene	2.5	2.5	U	UG/L
10/22/2014	US-06S	1,2,4-Trichlorobenzene	1	1	U	UG/L
10/22/2014	US-06S	1,2-Dibromo-3-Chloropropane	5	5	U	UG/L
10/22/2014	US-06S	1,2-Dibromoethane	2	2	U	UG/L
10/22/2014	US-06S	1,2-Dichloroethane	1	1	U	UG/L
10/22/2014	US-06S	1,2-Dichloropropane	1.7	1.7	U	UG/L
10/22/2014	US-06S	Benzene	1.6	1.6	U	UG/L
10/22/2014	US-06S	Carbon tetrachloride	2	2	U	UG/L
10/22/2014	US-06S	Chlorobenzene	1.6	1.6	U	UG/L
10/22/2014	US-06S	cis-1,2-Dichloroethene	1.8	1.8	U	UG/L
10/22/2014	US-06S	Ethylbenzene	1.6	1.6	U	UG/L
10/22/2014	US-06S	Methylene Chloride	1.3	1.3	U	UG/L
10/22/2014	US-06S	Styrene	1.7	1.7	U	UG/L
10/22/2014	US-06S	Tetrachloroethene	2.1	2.1	U	UG/L
10/22/2014	US-06S	Toluene	1.6	1.6	U	UG/L
10/22/2014	US-06S	trans-1,2-Dichloroethene	1.9	1.9	U	UG/L
10/22/2014	US-06S	Trichloroethene	1.9	1.9	U	UG/L
10/22/2014	US-06S	Vinyl chloride	2.3	2.3	U	UG/L

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Sample Date	Sample Point	Parameter	Result	Reporting Limit	Flags	UM
10/22/2014	US-06S	Xylenes, Total	3	3	U	UG/L
10/22/2014	US-06S	Calcium and Magnesium Hardness, Dissolved	521000	500		UG/L
10/22/2014	US-06S	Total Dissolved Solids Field Filtered	632	5	B*	MG/L
10/22/2014	US-06S	Total Dissolved Solids Field Filtered	685	5	H	MG/L
10/23/2014	W-06S	Fluoride, Dissolved	0.5	0.5	U	MG/L
10/23/2014	W-06S	Nitrate, Dissolved	0.11	0.02		MG/L
10/23/2014	W-06S	Arsenic, Dissolved	10	10	U	UG/L
10/23/2014	W-06S	Barium, Dissolved	200	200	U	UG/L
10/23/2014	W-06S	Boron, Dissolved	666	100		UG/L
10/23/2014	W-06S	Cadmium, Dissolved	5	5	U	UG/L
10/23/2014	W-06S	Calcium, Dissolved	490000	5000		UG/L
10/23/2014	W-06S	Chromium, Dissolved	10	10	U	UG/L
10/23/2014	W-06S	Cobalt, Dissolved	10	10	U	UG/L
10/23/2014	W-06S	Copper, Dissolved	10	10	U	UG/L
10/23/2014	W-06S	Iron, Dissolved	1590	100		UG/L
10/23/2014	W-06S	Lead, Dissolved	5.6	3		UG/L
10/23/2014	W-06S	Magnesium, Dissolved	202000	5000		UG/L
10/23/2014	W-06S	Manganese, Dissolved	686	5		UG/L
10/23/2014	W-06S	Nickel, Dissolved	21.8	10		UG/L
10/23/2014	W-06S	Silver, Dissolved	10	10	U	UG/L
10/23/2014	W-06S	Zinc, Dissolved	20	20	U	UG/L
10/23/2014	W-06S	Antimony, Dissolved	0.74	0.6		UG/L
10/23/2014	W-06S	Beryllium, Dissolved	0.4	0.4	U	UG/L
10/23/2014	W-06S	Selenium, Dissolved	5	5	U	UG/L
10/23/2014	W-06S	Thallium, Dissolved	0.2	0.2	U	UG/L
10/23/2014	W-06S	Mercury, Dissolved	0.2	0.2	U	UG/L
10/23/2014	W-06S	Dissolved Cyanide	0.01	0.01	U	MG/L
10/23/2014	W-06S	Chloride, Dissolved	419	1.7		MG/L
10/23/2014	W-06S	Sulfate, Dissolved	468	37.5		MG/L
10/23/2014	W-06S	1,1,1-Trichloroethane	8.4	8.4	U	UG/L
10/23/2014	W-06S	1,1,2-Trichloroethane	7.6	7.6	U	UG/L
10/23/2014	W-06S	1,1-Dichloroethene	10	10	U	UG/L
10/23/2014	W-06S	1,2,4-Trichlorobenzene	2.3	2.3	U	UG/L
10/23/2014	W-06S	1,2-Dibromo-3-Chloropropane	20	20	U	UG/L
10/23/2014	W-06S	1,2-Dibromoethane	8	8	U	UG/L
10/23/2014	W-06S	1,2-Dichloroethane	3.3	3.3	U	UG/L
10/23/2014	W-06S	1,2-Dichloropropane	6.8	6.8	U	UG/L
10/23/2014	W-06S	Benzene	6.4	6.4	U	UG/L
10/23/2014	W-06S	Carbon tetrachloride	8	8	U	UG/L
10/23/2014	W-06S	Chlorobenzene	6.4	6.4	U	UG/L
10/23/2014	W-06S	cis-1,2-Dichloroethene	7.2	7.2	U	UG/L
10/23/2014	W-06S	Ethylbenzene	6.4	6.4	U	UG/L
10/23/2014	W-06S	Methylene Chloride	5.2	5.2	U	UG/L
10/23/2014	W-06S	Styrene	6.8	6.8	U	UG/L
10/23/2014	W-06S	Tetrachloroethene	8.4	8.4	U	UG/L
10/23/2014	W-06S	Toluene	6.4	6.4	U	UG/L
10/23/2014	W-06S	trans-1,2-Dichloroethene	7.6	7.6	U	UG/L
10/23/2014	W-06S	Trichloroethene	7.6	7.6	U	UG/L

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Sample Date	Sample Point	Parameter	Result	Reporting Limit	Flags	UM
10/23/2014	W-06S	Vinyl chloride	9.2	9.2	U	UG/L
10/23/2014	W-06S	Xylenes, Total	3.3	3.3	U	UG/L
10/23/2014	W-06S	Calcium and Magnesium Hardness, Dissolved	2050000	.500		UG/L
10/23/2014	W-06S	Total Dissolved Solids Field Filtered	3210	8		MG/L

Abbreviations:
UG/L = micrograms per liter
MG/L = milligrams per liter
MG/L AS N = milligrams per liter as nitrogen
MG/L AS P = milligrams per liter as phosphorus
UM = Unit of measure

Laboratory Notes:
B = Compound found in the blank
U = Parameter was not detected
b = Result detected in the Unseeded Control blank
^ = Instrument related QC exceeds the control limits
H = Sample was preped or analyzed beyond the specified holding time
* = LCS or LCSD exceeds the control limits; ISTD response or retention time outside acceptable limits

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Village of Antioch Well Results
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Sample Date	Sample Point	Parameter	Result	Reporting Limit	Flags	UM
4/18/2014	VW-03	Fluoride	0.81	0.5		MG/L
4/18/2014	VW-03	Ammonia as N	0.56	0.015		MG/L
4/18/2014	VW-03	Total Kjeldahl Nitrogen	0.67	0.15		MG/L AS N
4/18/2014	VW-03	Nitrite	0.05	0.05	U	MG/L AS N
4/18/2014	VW-03	Total Recoverable Phenolics	0.005	0.005	U	MG/L
4/18/2014	VW-03	Aldicarb	2.5	2.5	U	UG/L
4/18/2014	VW-03	Carbofuran	2.5	2.5	U	UG/L
4/18/2014	VW-03	Endothall	25	25	U	UG/L
4/18/2014	VW-03	Arsenic	10	10	U	UG/L
4/18/2014	VW-03	Barium	200	200	U	UG/L
4/18/2014	VW-03	Beryllium	0.4	0.4	U	UG/L
4/18/2014	VW-03	Boron	307	100		UG/L
4/18/2014	VW-03	Cadmium	5	5	U	UG/L
4/18/2014	VW-03	Calcium	50400	5000		UG/L
4/18/2014	VW-03	Chromium	10	10	U	UG/L
4/18/2014	VW-03	Cobalt	10	10	U	UG/L
4/18/2014	VW-03	Copper	13.1	10		UG/L
4/18/2014	VW-03	Iron	970	100		UG/L
4/18/2014	VW-03	Lead	3	3	U	UG/L
4/18/2014	VW-03	Magnesium	38600	5000		UG/L
4/18/2014	VW-03	Manganese	11.9	5		UG/L
4/18/2014	VW-03	Nickel	10	10	U	UG/L
4/18/2014	VW-03	Silver	10	10	U	UG/L
4/18/2014	VW-03	Zinc	61.6	20		UG/L
4/18/2014	VW-03	Antimony	0.6	0.6	U	UG/L
4/18/2014	VW-03	Selenium	5	5	U	UG/L
4/18/2014	VW-03	Thallium	0.2	0.2	U	UG/L
4/18/2014	VW-03	Mercury	0.0002	0.0002	U	MG/L
4/18/2014	VW-03	alpha-Chlordane	0.05	0.05	U	UG/L
4/18/2014	VW-03	Endrin	0.1	0.1	U	UG/L
4/18/2014	VW-03	gamma-BHC (Lindane)	0.05	0.05	U	UG/L
4/18/2014	VW-03	gamma-Chlordane	0.05	0.05	U	UG/L
4/18/2014	VW-03	Heptachlor	0.05	0.05	U	UG/L
4/18/2014	VW-03	Heptachlor epoxide	0.05	0.05	U	UG/L
4/18/2014	VW-03	Methoxychlor	0.5	0.5	U	UG/L
4/18/2014	VW-03	Toxaphene	5	5	U	UG/L
4/18/2014	VW-03	Aroclor 1016	0.47	0.47	U	UG/L
4/18/2014	VW-03	Aroclor 1221	0.47	0.47	U	UG/L
4/18/2014	VW-03	Aroclor 1232	0.47	0.47	U	UG/L
4/18/2014	VW-03	Aroclor 1242	0.47	0.47	U	UG/L
4/18/2014	VW-03	Aroclor 1248	0.47	0.47	U	UG/L
4/18/2014	VW-03	Aroclor 1254	0.47	0.47	U	UG/L
4/18/2014	VW-03	Aroclor 1260	0.47	0.47	U	UG/L
4/18/2014	VW-03	2,4,5-TP (Silvex)	2	2	U	UG/L

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Sample Date	Sample Point	Parameter	Result	Reporting Limit	Flags	UM
4/18/2014	VW-03	2,4-D	10	10	U	UG/L
4/18/2014	VW-03	Dalapon	1	1	U	UG/L
4/18/2014	VW-03	Dinoseb	1	1	U	UG/L
4/18/2014	VW-03	Picloram	1.1	1		UG/L
4/18/2014	VW-03	1,2-Dichlorobenzene	0.15	0.15	U *	UG/L
4/18/2014	VW-03	1,4-Dichlorobenzene	0.1	0.1	U	UG/L
4/18/2014	VW-03	Alachlor	1	1	U	UG/L
4/18/2014	VW-03	Atrazine	3	3	U *	UG/L
4/18/2014	VW-03	Benzo(a)pyrene	0.13	0.13	U	UG/L
4/18/2014	VW-03	Bis(2-ethylhexyl) phthalate	4.8	4.8	U	UG/L
4/18/2014	VW-03	Hexachlorocyclopentadiene	0.7	0.7	U	UG/L
4/18/2014	VW-03	Pentachlorophenol	0.34	0.34	U	UG/L
4/18/2014	VW-03	Simazine	4	4	U	UG/L
4/18/2014	VW-03	Cyanide, Total	0.01	0.01	U	MG/L
4/18/2014	VW-03	Chloride	31.7	1		MG/L
4/18/2014	VW-03	Sulfate	51.7	3		MG/L
4/18/2014	VW-03	Nitrogen, Nitrate	0.02	0.02	U	MG/L AS N
4/18/2014	VW-03	1,1,1-Trichloroethane	2.1	2.1	U	UG/L
4/18/2014	VW-03	1,1,2-Trichloroethane	1.9	1.9	U	UG/L
4/18/2014	VW-03	1,1-Dichloroethene	2.5	2.5	U	UG/L
4/18/2014	VW-03	1,2,4-Trichlorobenzene	1	1	U	UG/L
4/18/2014	VW-03	1,2-Dibromo-3-Chloropropane	5	5	U	UG/L
4/18/2014	VW-03	1,2-Dibromoethane	2	2	U	UG/L
4/18/2014	VW-03	1,2-Dichloroethane	1	1	U	UG/L
4/18/2014	VW-03	1,2-Dichloropropane	1.7	1.7	U	UG/L
4/18/2014	VW-03	Benzene	1.6	1.6	U	UG/L
4/18/2014	VW-03	Carbon tetrachloride	2	2	U	UG/L
4/18/2014	VW-03	Chlorobenzene	1.6	1.6	U	UG/L
4/18/2014	VW-03	Chloroethane	2.5	2.5	U	UG/L
4/18/2014	VW-03	cis-1,2-Dichloroethene	1.8	1.8	U	UG/L
4/18/2014	VW-03	Ethylbenzene	1.6	1.6	U	UG/L
4/18/2014	VW-03	Methylene Chloride	1.3	1.3	U	UG/L
4/18/2014	VW-03	Styrene	1.7	1.7	U	UG/L
4/18/2014	VW-03	Tetrachloroethene	2.1	2.1	U	UG/L
4/18/2014	VW-03	Toluene	1.6	1.6	U	UG/L
4/18/2014	VW-03	trans-1,2-Dichloroethene	1.9	1.9	U	UG/L
4/18/2014	VW-03	Trichloroethene	1.9	1.9	U	UG/L
4/18/2014	VW-03	Vinyl chloride	2.3	2.3	U	UG/L
4/18/2014	VW-03	Xylenes, Total	3	3	U	UG/L
4/18/2014	VW-03	Ethane	15	15	U	UG/L
4/18/2014	VW-03	Ethene	13	13	U	UG/L
4/18/2014	VW-03	Methane	12	8		UG/L
4/18/2014	VW-03	Alkalinity, Total	294	10		MG/L
4/18/2014	VW-03	Calcium and Magnesium Hardness	285000	500		UG/L

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Sample Date	Sample Point	Parameter	Result	Reporting Limit	Flags	UM
4/18/2014	VW-03	Total Dissolved Solids	385	5		MG/L
4/18/2014	VW-03	Orthophosphate	0.047	0.02		MG/L AS P
4/18/2014	VW-03	Sulfide	1	1	U	MG/L
4/18/2014	VW-03	Biochemical Oxygen Demand	2	2	U	MG/L
4/18/2014	VW-03	Total Organic Carbon	1	1	U	MG/L
10/22/2014	VW-03	Fluoride	0.76	0.5		MG/L
10/22/2014	VW-03	Ammonia as N	0.57	0.015		MG/L
10/22/2014	VW-03	Total Kjeldahl Nitrogen	0.63	0.15	B	MG/L AS N
10/22/2014	VW-03	Nitrite	0.05	0.05	U	MG/L AS N
10/22/2014	VW-03	Total Recoverable Phenolics	0.005	0.005	U	MG/L
10/22/2014	VW-03	Aldicarb	10	2.5	U	UG/L
10/22/2014	VW-03	Carbofuran	5	2.5	U	UG/L
10/22/2014	VW-03	Endothall	25	25	U	UG/L
10/22/2014	VW-03	Arsenic	10	10	U	UG/L
10/22/2014	VW-03	Barium	200	200	U	UG/L
10/22/2014	VW-03	Beryllium	0.4	0.4	U	UG/L
10/22/2014	VW-03	Boron	284	100	^	UG/L
10/22/2014	VW-03	Cadmium	5	5	U	UG/L
10/22/2014	VW-03	Calcium	49200	5000		UG/L
10/22/2014	VW-03	Chromium	10	10	U	UG/L
10/22/2014	VW-03	Cobalt	10	10	U	UG/L
10/22/2014	VW-03	Copper	10	10	U	UG/L
10/22/2014	VW-03	Iron	930	100		UG/L
10/22/2014	VW-03	Lead	3	3	U	UG/L
10/22/2014	VW-03	Magnesium	39400	5000		UG/L
10/22/2014	VW-03	Manganese	11.1	5		UG/L
10/22/2014	VW-03	Nickel	10	10	U	UG/L
10/22/2014	VW-03	Silver	10	10	U	UG/L
10/22/2014	VW-03	Zinc	20	20	U	UG/L
10/22/2014	VW-03	Antimony	0.6	0.6	U	UG/L
10/22/2014	VW-03	Selenium	5	5	U	UG/L
10/22/2014	VW-03	Thallium	0.2	0.2	U	UG/L
10/22/2014	VW-03	Mercury	0.0002	0.0002	U	MG/L
10/22/2014	VW-03	alpha-Chlordane	0.05	0.05	U	UG/L
10/22/2014	VW-03	Endrin	0.1	0.1	U	UG/L
10/22/2014	VW-03	gamma-BHC (Lindane)	0.05	0.05	U	UG/L
10/22/2014	VW-03	gamma-Chlordane	0.05	0.05	U	UG/L
10/22/2014	VW-03	Heptachlor	0.05	0.05	U	UG/L
10/22/2014	VW-03	Heptachlor epoxide	0.05	0.05	U	UG/L
10/22/2014	VW-03	Methoxychlor	0.5	0.5	U	UG/L
10/22/2014	VW-03	Toxaphene	5	5	U	UG/L
10/22/2014	VW-03	Aroclor 1016	0.47	0.47	U	UG/L
10/22/2014	VW-03	Aroclor 1221	0.47	0.47	U	UG/L
10/22/2014	VW-03	Aroclor 1232	0.47	0.47	U	UG/L

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Sample Date	Sample Point	Parameter	Result	Reporting Limit	Flags	UM
10/22/2014	VW-03	Aroclor 1242	0.47	0.47	U	UG/L
10/22/2014	VW-03	Aroclor 1248	0.47	0.47	U	UG/L
10/22/2014	VW-03	Aroclor 1254	0.47	0.47	U	UG/L
10/22/2014	VW-03	Aroclor 1260	0.47	0.47	U	UG/L
10/22/2014	VW-03	2,4,5-TP (Silvex)	2	2	U	UG/L
10/22/2014	VW-03	2,4-D	10	10	U	UG/L
10/22/2014	VW-03	Dalapon	1	1	U	UG/L
10/22/2014	VW-03	Dinoseb	1	1	U	UG/L
10/22/2014	VW-03	Picloram	1	1	U	UG/L
10/22/2014	VW-03	1,2-Dichlorobenzene	0.15	0.15	U	UG/L
10/22/2014	VW-03	1,4-Dichlorobenzene	0.1	0.1	U	UG/L
10/22/2014	VW-03	Alachlor	2	1		UG/L
10/22/2014	VW-03	Atrazine	3	3	U *	UG/L
10/22/2014	VW-03	Benzo(a)pyrene	0.13	0.13	U	UG/L
10/22/2014	VW-03	Bis(2-ethylhexyl) phthalate	4.8	4.8	U *	UG/L
10/22/2014	VW-03	Hexachlorocyclopentadiene	0.7	0.7	U	UG/L
10/22/2014	VW-03	Pentachlorophenol	0.34	0.34	U	UG/L
10/22/2014	VW-03	Simazine	4	4	U	UG/L
10/22/2014	VW-03	Cyanide, Total	0.01	0.01	U	MG/L
10/22/2014	VW-03	Chloride	34.1	1		MG/L
10/22/2014	VW-03	Sulfate	48	7.5		MG/L
10/22/2014	VW-03	Nitrogen, Nitrate	0.02	0.02		MG/L AS N
10/22/2014	VW-03	1,1,1-Trichloroethane	2.1	2.1	U	UG/L
10/22/2014	VW-03	1,1,2-Trichloroethane	1.9	1.9	U	UG/L
10/22/2014	VW-03	1,1-Dichloroethene	2.5	2.5	U	UG/L
10/22/2014	VW-03	1,2,4-Trichlorobenzene	1	1	U	UG/L
10/22/2014	VW-03	1,2-Dibromo-3-Chloropropane	5	5	U	UG/L
10/22/2014	VW-03	1,2-Dibromoethane	2	2	U	UG/L
10/22/2014	VW-03	1,2-Dichloroethane	1	1	U	UG/L
10/22/2014	VW-03	1,2-Dichloropropane	1.7	1.7	U	UG/L
10/22/2014	VW-03	Benzene	1.6	1.6	U	UG/L
10/22/2014	VW-03	Carbon tetrachloride	2	2	U	UG/L
10/22/2014	VW-03	Chlorobenzene	1.6	1.6	U	UG/L
10/22/2014	VW-03	Chloroethane	2.5	2.5	U	UG/L
10/22/2014	VW-03	cis-1,2-Dichloroethene	1.8	1.8	U	UG/L
10/22/2014	VW-03	Ethylbenzene	1.6	1.6	U	UG/L
10/22/2014	VW-03	Methylene Chloride	1.3	1.3	U	UG/L
10/22/2014	VW-03	Styrene	1.7	1.7	U	UG/L
10/22/2014	VW-03	Tetrachloroethene	2.1	2.1	U	UG/L
10/22/2014	VW-03	Toluene	1.6	1.6	U	UG/L
10/22/2014	VW-03	trans-1,2-Dichloroethene	1.9	1.9	U	UG/L
10/22/2014	VW-03	Trichloroethene	1.9	1.9	U	UG/L
10/22/2014	VW-03	Vinyl chloride	2.3	2.3	U	UG/L
10/22/2014	VW-03	Xylenes, Total	3	3	U	UG/L

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Sample Date	Sample Point	Parameter	Result	Reporting Limit	Flags	UM
10/22/2014	VW-03	Ethane	15	15	U	UG/L
10/22/2014	VW-03	Ethene	13	13	U	UG/L
10/22/2014	VW-03	Methane	46	8		UG/L
10/22/2014	VW-03	Alkalinity, Total	300	10		MG/L
10/22/2014	VW-03	Calcium and Magnesium Hardness	285000	500		UG/L
10/22/2014	VW-03	Total Dissolved Solids	382	5		MG/L
10/22/2014	VW-03	Orthophosphate	0.049	0.02	U	MG/L AS P
10/22/2014	VW-03	Sulfide	1	1	U	MG/L
10/22/2014	VW-03	Biochemical Oxygen Demand	2		U	MG/L
10/22/2014	VW-03	Total Organic Carbon	1	1	U	MG/L

Abbreviations:
UG/L = micrograms per liter
MG/L = milligrams per liter
MG/L AS N = milligrams per liter as nitrogen
MG/L AS P = milligrams per liter as phosphorus
UM = Unit of measure

Laboratory Notes:
U = Parameter was not detected
B = Compound was found in the blank and sample
* = ISTD response or retention time outside acceptance limits
^ = Instrument related QC exceeds the control limits

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Appendix F
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Sample Date	Sample Point	Parameter	Result	Reporting Limit	Flags	UM
10/21/2014	TB	1,1,1-Trichloroethane	2.1	2.1	U	µg/L
10/21/2014	TB	1,1,2-Trichloroethane	1.9	1.9	U	µg/L
10/21/2014	TB	1,1-Dichloroethene	2.5	2.5	U	µg/L
10/21/2014	TB	1,2,4-Trichlorobenzene	1	1	U	µg/L
10/21/2014	TB	1,2-Dibromo-3-Chloropropane	5	5	U	µg/L
10/21/2014	TB	1,2-Dibromoethane	2	2	U	µg/L
10/21/2014	TB	1,2-Dichloroethane	1	1	U	µg/L
10/21/2014	TB	1,2-Dichloropropane	1.7	1.7	U	µg/L
10/21/2014	TB	Benzene	1.6	1.6	U	µg/L
10/21/2014	TB	Carbon tetrachloride	2	2	U	µg/L
10/21/2014	TB	Chlorobenzene	1.6	1.6	U	µg/L
10/21/2014	TB	Chloroethane	2.5	2.5	U	µg/L
10/21/2014	TB	cis-1,2-Dichloroethene	1.8	1.8	U	µg/L
10/21/2014	TB	Ethylbenzene	1.6	1.6	U	µg/L
10/21/2014	TB	Methylene Chloride	1.3	1.3	U	µg/L
10/21/2014	TB	Styrene	1.7	1.7	U	µg/L
10/21/2014	TB	Tetrachloroethene	2.1	2.1	U	µg/L
10/21/2014	TB	Toluene	1.6	1.6	U	µg/L
10/21/2014	TB	trans-1,2-Dichloroethene	1.9	1.9	U	µg/L
10/21/2014	TB	Trichloroethene	1.9	1.9	U	µg/L
10/21/2014	TB	Vinyl chloride	2.3	2.3	U	µg/L
10/21/2014	TB	Xylenes, Total	3	3	U	µg/L
10/22/2014	DUP (US01D)	Fluoride, Dissolved	0.5	0.5	U	mg/L
10/22/2014	DUP (US01D)	Ammonia	0.88	0.1		mg/L
10/22/2014	DUP (US01D)	Total Kjeldahl Nitrogen	0.96	0.15		mg/L
10/22/2014	DUP (US01D)	Nitrate, Dissolved	0.02	0.02	U	mg/L
10/22/2014	DUP (US01D)	Nitrite	0.02	0.02	U	mg/L
10/22/2014	DUP (US01D)	Arsenic, Dissolved	10	10	U	µg/L
10/22/2014	DUP (US01D)	Barium, Dissolved	200	200	U	µg/L
10/22/2014	DUP (US01D)	Boron, Dissolved	266	100		µg/L
10/22/2014	DUP (US01D)	Cadmium, Dissolved	5	5	U	µg/L
10/22/2014	DUP (US01D)	Calcium, Dissolved	66400	5000		µg/L
10/22/2014	DUP (US01D)	Chromium, Dissolved	10	10	U	µg/L
10/22/2014	DUP (US01D)	Cobalt, Dissolved	10	10	U	µg/L
10/22/2014	DUP (US01D)	Copper, Dissolved	10	10	U	µg/L
10/22/2014	DUP (US01D)	Iron, Dissolved	559	100		µg/L
10/22/2014	DUP (US01D)	Lead, Dissolved	3.8	3		µg/L
10/22/2014	DUP (US01D)	Magnesium, Dissolved	50400	5000		µg/L
10/22/2014	DUP (US01D)	Manganese, Dissolved	36.6	5		µg/L
10/22/2014	DUP (US01D)	Nickel, Dissolved	10	10	U	µg/L
10/22/2014	DUP (US01D)	Silver, Dissolved	10	10	U	µg/L
10/22/2014	DUP (US01D)	Zinc, Dissolved	20	20	U	µg/L
10/22/2014	DUP (US01D)	Antimony, Dissolved	0.6	0.6	U	µg/L

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10/22/2014	DUP (US01D)	Beryllium, Dissolved	0.4	0.4	U	µg/L
10/22/2014	DUP (US01D)	Selenium, Dissolved	5	5	U ^	µg/L
10/22/2014	DUP (US01D)	Thallium, Dissolved	0.2	0.2	U	µg/L
10/22/2014	DUP (US01D)	Mercury, Dissolved	0.2	0.2	U	µg/L
10/22/2014	DUP (US01D)	Dissolved Cyanide	0.01	0.01	U	µg/L
10/22/2014	DUP (US01D)	Chloride, Dissolved	35.4	1		mg/L
10/22/2014	DUP (US01D)	Sulfate	123	7.5		mg/L
10/22/2014	DUP (US01D)	Sulfate, Dissolved	125	7.5		mg/L
10/22/2014	DUP (US01D)	Nitrogen, Nitrate	0.02	0.02	U	mg/L
10/22/2014	DUP (US01D)	1,1,1-Trichloroethane	2.1	2.1	U	µg/L
10/22/2014	DUP (US01D)	1,1,2-Trichloroethane	1.9	1.9	U	µg/L
10/22/2014	DUP (US01D)	1,1-Dichloroethene	2.5	2.5	U	µg/L
10/22/2014	DUP (US01D)	1,2,4-Trichlorobenzene	1	1	U	µg/L
10/22/2014	DUP (US01D)	1,2-Dibromo-3-Chloropropane	5	5	U	µg/L
10/22/2014	DUP (US01D)	1,2-Dibromoethane	2	2	U	µg/L
10/22/2014	DUP (US01D)	1,2-Dichloroethane	1	1	U	µg/L
10/22/2014	DUP (US01D)	1,2-Dichloropropane	1.7	1.7	U	µg/L
10/22/2014	DUP (US01D)	Benzene	1.6	1.6	U	µg/L
10/22/2014	DUP (US01D)	Carbon tetrachloride	2	2	U	µg/L
10/22/2014	DUP (US01D)	Chlorobenzene	1.6	1.6	U	µg/L
10/22/2014	DUP (US01D)	Chloroethane	2.5	2.5	U	µg/L
10/22/2014	DUP (US01D)	cis-1,2-Dichloroethene	1.8	1.8	U	µg/L
10/22/2014	DUP (US01D)	Ethylbenzene	1.6	1.6	U	µg/L
10/22/2014	DUP (US01D)	Methylene Chloride	1.3	1.3	U	µg/L
10/22/2014	DUP (US01D)	Styrene	1.7	1.7	U	µg/L
10/22/2014	DUP (US01D)	Tetrachloroethene	2.1	2.1	U	µg/L
10/22/2014	DUP (US01D)	Toluene	1.6	1.6	U	µg/L
10/22/2014	DUP (US01D)	trans-1,2-Dichloroethene	1.9	1.9	U	µg/L
10/22/2014	DUP (US01D)	Trichloroethene	1.9	1.9	U	µg/L
10/22/2014	DUP (US01D)	Vinyl chloride	2.3	2.3	U	µg/L
10/22/2014	DUP (US01D)	Xylenes, Total	3	3	U	µg/L
10/22/2014	DUP (US01D)	Ethane	15	15	U	µg/L
10/22/2014	DUP (US01D)	Ethene	13	13	U	µg/L
10/22/2014	DUP (US01D)	Methane	8	8	U	µg/L
10/22/2014	DUP (US01D)	Alkalinity, Total	288	10		mg/L
10/22/2014	DUP (US01D)	Calcium and Magnesium Hardness, Dissolved	374000	500		mg/L
10/22/2014	DUP (US01D)	Total Dissolved Solids Field Filtered	470	5		mg/L
10/22/2014	DUP (US01D)	Orthophosphate	0.07	0.02		µg/L
10/22/2014	DUP (US01D)	Sulfide	1	1	U	µg/L
10/22/2014	DUP (US01D)	Biochemical Oxygen Demand	2	2	U	mg/L
10/22/2014	DUP (US01D)	Total Organic Carbon	1.4	1		mg/L
10/23/2014	TB	1,1,1-Trichloroethane	2.1	2.1	U	µg/L
10/23/2014	TB	1,1,2-Trichloroethane	1.9	1.9	U	µg/L
10/23/2014	TB	1,1-Dichloroethene	2.5	2.5	U	µg/L
10/23/2014	TB	1,2,4-Trichlorobenzene	1	1	U	µg/L

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10/23/2014	TB	1,2-Dibromo-3-Chloropropane	5	5	U	µg/L
10/23/2014	TB	1,2-Dibromoethane	2	2	U	µg/L
10/23/2014	TB	1,2-Dichloroethane	1	1	U	µg/L
10/23/2014	TB	1,2-Dichloropropane	1.7	1.7	U	µg/L
10/23/2014	TB	Benzene	1.6	1.6	U	µg/L
10/23/2014	TB	Carbon tetrachloride	2	2	U	µg/L
10/23/2014	TB	Chlorobenzene	1.6	1.6	U	µg/L
10/23/2014	TB	Chloroethane	2.5	2.5	U	µg/L
10/23/2014	TB	cis-1,2-Dichloroethene	1.8	1.8	U	µg/L
10/23/2014	TB	Ethylbenzene	1.6	1.6	U	µg/L
10/23/2014	TB	Methylene Chloride	1.3	1.3	U	µg/L
10/23/2014	TB	Styrene	1.7	1.7	U	µg/L
10/23/2014	TB	Tetrachloroethene	2.1	2.1	U	µg/L
10/23/2014	TB	Toluene	1.6	1.6	U	µg/L
10/23/2014	TB	trans-1,2-Dichloroethene	1.9	1.9	U	µg/L
10/23/2014	TB	Trichloroethene	1.9	1.9	U	µg/L
10/23/2014	TB	Vinyl chloride	2.3	2.3	U	µg/L
10/23/2014	TB	Xylenes, Total	3	3	U	µg/L
10/21/2014	TB	1,1,1-Trichloroethane	2.1	2.1	U	µg/L
10/23/2014	TB	1,1,2-Trichloroethane	1.9	1.9	U	µg/L
10/23/2014	TB	1,1-Dichloroethene	2.5	2.5	U	µg/L
10/23/2014	TB	1,2,4-Trichlorobenzene	1	1	U	µg/L
10/23/2014	TB	1,2-Dibromo-3-Chloropropane	5	5	U	µg/L
10/23/2014	TB	1,2-Dibromoethane	2	2	U	µg/L
10/23/2014	TB	1,2-Dichloroethane	1	1	U	µg/L
10/23/2014	TB	1,2-Dichloropropane	1.7	1.7	U	µg/L
10/23/2014	TB	Benzene	1.6	1.6	U	µg/L
10/23/2014	TB	Carbon tetrachloride	2	2	U	µg/L
10/23/2014	TB	Chlorobenzene	1.6	1.6	U	µg/L
10/23/2014	TB	Chloroethane	2.5	2.5	U	µg/L
10/23/2014	TB	cis-1,2-Dichloroethene	1.8	1.8	U	µg/L
10/23/2014	TB	Ethylbenzene	1.6	1.6	U	µg/L
10/23/2014	TB	Methylene Chloride	1.3	1.3	U	µg/L
10/23/2014	TB	Styrene	1.7	1.7	U	µg/L
10/23/2014	TB	Tetrachloroethene	2.1	2.1	U	µg/L
10/23/2014	TB	Toluene	1.6	1.6	U	µg/L
10/23/2014	TB	trans-1,2-Dichloroethene	1.9	1.9	U	µg/L
10/23/2014	TB	Trichloroethene	1.9	1.9	U	µg/L
10/23/2014	TB	Vinyl chloride	2.3	2.3	U	µg/L
10/23/2014	TB	Xylenes, Total	3	3	U	µg/L
10/21/2014	DUP02 (G102)	Fluoride, Dissolved	0.5	0.5	U	mg/L
10/21/2014	DUP02 (G102)	Nitrate, Dissolved	0.02	0.02	U	mg/L
10/21/2014	DUP02 (G102)	Arsenic, Dissolved	10	10	U	µg/L
10/21/2014	DUP02 (G102)	Barium, Dissolved	227	200		µg/L
10/21/2014	DUP02 (G102)	Boron, Dissolved	220	100		µg/L

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10/21/2014	DUP02 (G102)	Cadmium, Dissolved	5	5	U	µg/L
10/21/2014	DUP02 (G102)	Calcium, Dissolved	124000	5000		µg/L
10/21/2014	DUP02 (G102)	Chromium, Dissolved	10	10	U	µg/L
10/21/2014	DUP02 (G102)	Cobalt, Dissolved	10	10	U	µg/L
10/21/2014	DUP02 (G102)	Copper, Dissolved	10	10	U	µg/L
10/21/2014	DUP02 (G102)	Iron, Dissolved	6600	100		µg/L
10/21/2014	DUP02 (G102)	Lead, Dissolved	3.3	3		µg/L
10/21/2014	DUP02 (G102)	Magnesium, Dissolved	57000	5000		µg/L
10/21/2014	DUP02 (G102)	Manganese, Dissolved	105	5		µg/L
10/21/2014	DUP02 (G102)	Nickel, Dissolved	10	10	U	µg/L
10/21/2014	DUP02 (G102)	Silver, Dissolved	10	10	U	µg/L
10/21/2014	DUP02 (G102)	Zinc, Dissolved	20	20	U	µg/L
10/21/2014	DUP02 (G102)	Antimony, Dissolved	0.6	0.6	U	µg/L
10/21/2014	DUP02 (G102)	Beryllium, Dissolved	0.4	0.4	U	µg/L
10/21/2014	DUP02 (G102)	Selenium, Dissolved	5	5	U ^	µg/L
10/21/2014	DUP02 (G102)	Thallium, Dissolved	0.2	0.2	U	µg/L
10/21/2014	DUP02 (G102)	Mercury, Dissolved	0.2	0.2	U	µg/L
10/21/2014	DUP02 (G102)	Dissolved Cyanide	0.01	0.01	U	µg/L
10/21/2014	DUP02 (G102)	Chloride, Dissolved	277	1		mg/L
10/21/2014	DUP02 (G102)	Sulfate, Dissolved	42.1	7.5		mg/L
10/21/2014	DUP02 (G102)	1,1,1-Trichloroethane	2.1	2.1	U	µg/L
10/21/2014	DUP02 (G102)	1,1,2-Trichloroethane	1.9	1.9	U	µg/L
10/21/2014	DUP02 (G102)	1,1-Dichloroethene	2.5	2.5	U	µg/L
10/21/2014	DUP02 (G102)	1,2,4-Trichlorobenzene	1	1	U	µg/L
10/21/2014	DUP02 (G102)	1,2-Dibromo-3-Chloropropane	5	5	U	µg/L
10/21/2014	DUP02 (G102)	1,2-Dibromoethane	2	2	U	µg/L
10/21/2014	DUP02 (G102)	1,2-Dichloroethane	1	1	U	µg/L
10/21/2014	DUP02 (G102)	1,2-Dichloropropane	1.7	1.7	U	µg/L
10/21/2014	DUP02 (G102)	Benzene	1.6	1.6	U	µg/L
10/21/2014	DUP02 (G102)	Carbon tetrachloride	2	2	U	µg/L
10/21/2014	DUP02 (G102)	Chlorobenzene	1.6	1.6	U	µg/L
10/21/2014	DUP02 (G102)	Chloroethane	2.5	2.5	U	µg/L
10/21/2014	DUP02 (G102)	cis-1,2-Dichloroethene	1.8	1.8	U	µg/L
10/21/2014	DUP02 (G102)	Ethylbenzene	1.6	1.6	U	µg/L
10/21/2014	DUP02 (G102)	Methylene Chloride	1.3	1.3	U	µg/L
10/21/2014	DUP02 (G102)	Styrene	1.7	1.7	U	µg/L
10/21/2014	DUP02 (G102)	Tetrachloroethene	2.1	2.1	U	µg/L
10/21/2014	DUP02 (G102)	Toluene	1.6	1.6	U	µg/L
10/21/2014	DUP02 (G102)	trans-1,2-Dichloroethene	1.9	1.9	U	µg/L
10/21/2014	DUP02 (G102)	Trichloroethene	1.9	1.9	U	µg/L
10/21/2014	DUP02 (G102)	Vinyl chloride	2.3	2.3	U	µg/L
10/21/2014	DUP02 (G102)	Xylenes, Total	3	3	U	µg/L
10/21/2014	DUP02 (G102)	Calcium and Magnesium Hardness, Dissolved	544000	500		µg/L
10/21/2014	DUP02 (G102)	Total Dissolved Solids Field Filtered	937	5		mg/L
10/21/2014	TB	1,1,1-Trichloroethane	2.1	2.1	U	µg/L

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10/21/2014	TB	1,1,2-Trichloroethane	1.9	1.9	U	µg/L
10/21/2014	TB	1,1-Dichloroethene	2.5	2.5	U	µg/L
10/21/2014	TB	1,2,4-Trichlorobenzene	1	1	U	µg/L
10/21/2014	TB	1,2-Dibromo-3-Chloropropane	5	5	U	µg/L
10/21/2014	TB	1,2-Dibromoethane	2	2	U	µg/L
10/21/2014	TB	1,2-Dichloroethane	1	1	U	µg/L
10/21/2014	TB	1,2-Dichloropropane	1.7	1.7	U	µg/L
10/21/2014	TB	Benzene	1.6	1.6	U	µg/L
10/21/2014	TB	Carbon tetrachloride	2	2	U	µg/L
10/21/2014	TB	Chlorobenzene	1.6	1.6	U	µg/L
10/21/2014	TB	Chloroethane	2.5	2.5	U	µg/L
10/21/2014	TB	cis-1,2-Dichloroethene	1.8	1.8	U	µg/L
10/21/2014	TB	Ethylbenzene	1.6	1.6	U	µg/L
10/21/2014	TB	Methylene Chloride	1.3	1.3	U	µg/L
10/21/2014	TB	Styrene	1.7	1.7	U	µg/L
10/21/2014	TB	Tetrachloroethene	2.1	2.1	U	µg/L
10/21/2014	TB	Toluene	1.6	1.6	U	µg/L
10/21/2014	TB	trans-1,2-Dichloroethene	1.9	1.9	U	µg/L
10/21/2014	TB	Trichloroethene	1.9	1.9	U	µg/L
10/21/2014	TB	Vinyl chloride	2.3	2.3	U	µg/L
10/21/2014	TB	Xylenes, Total	3	3	U	µg/L
10/22/2014	TB	1,1,1-Trichloroethane	2.1	2.1	U	µg/L
10/22/2014	TB	1,1,2-Trichloroethane	1.9	1.9	U	µg/L
10/22/2014	TB	1,1-Dichloroethene	2.5	2.5	U	µg/L
10/22/2014	TB	1,2,4-Trichlorobenzene	1	1	U	µg/L
10/22/2014	TB	1,2-Dibromo-3-Chloropropane	5	5	U	µg/L
10/22/2014	TB	1,2-Dibromoethane	2	2	U	µg/L
10/22/2014	TB	1,2-Dichloroethane	1	1	U	µg/L
10/22/2014	TB	1,2-Dichloropropane	1.7	1.7	U	µg/L
10/22/2014	TB	Benzene	1.6	1.6	U	µg/L
10/22/2014	TB	Carbon tetrachloride	2	2	U	µg/L
10/22/2014	TB	Chlorobenzene	1.6	1.6	U	µg/L
10/22/2014	TB	Chloroethane	2.5	2.5	U	µg/L
10/22/2014	TB	cis-1,2-Dichloroethene	1.8	1.8	U	µg/L
10/22/2014	TB	Ethylbenzene	1.6	1.6	U	µg/L
10/22/2014	TB	Methylene Chloride	1.3	1.3	U	µg/L
10/22/2014	TB	Styrene	1.7	1.7	U	µg/L
10/22/2014	TB	Tetrachloroethene	2.1	2.1	U	µg/L
10/22/2014	TB	Toluene	1.6	1.6	U	µg/L
10/22/2014	TB	trans-1,2-Dichloroethene	1.9	1.9	U	µg/L
10/22/2014	TB	Trichloroethene	1.9	1.9	U	µg/L
10/22/2014	TB	Vinyl chloride	2.3	2.3	U	µg/L
10/22/2014	TB	Xylenes, Total	3	3	U	µg/L
10/21/2014	TB	1,1,1-Trichloroethane	2.1	2.1	U	µg/L
10/23/2014	TB	1,1,2-Trichloroethane	1.9	1.9	U	µg/L

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10/23/2014	TB	1,1-Dichloroethene	2.5	2.5	U	µg/L
10/23/2014	TB	1,2,4-Trichlorobenzene	1	1	U	µg/L
10/23/2014	TB	1,2-Dibromo-3-Chloropropane	5	5	U	µg/L
10/23/2014	TB	1,2-Dibromoethane	2	2	U	µg/L
10/23/2014	TB	1,2-Dichloroethane	1	1	U	µg/L
10/23/2014	TB	1,2-Dichloropropane	1.7	1.7	U	µg/L
10/23/2014	TB	Benzene	1.6	1.6	U	µg/L
10/23/2014	TB	Carbon tetrachloride	2	2	U	µg/L
10/23/2014	TB	Chlorobenzene	1.6	1.6	U	µg/L
10/23/2014	TB	Chloroethane	2.5	2.5	U	µg/L
10/23/2014	TB	cis-1,2-Dichloroethene	1.8	1.8	U	µg/L
10/23/2014	TB	Ethylbenzene	1.6	1.6	U	µg/L
10/23/2014	TB	Methylene Chloride	1.3	1.3	U	µg/L
10/23/2014	TB	Styrene	1.7	1.7	U	µg/L
10/23/2014	TB	Tetrachloroethene	2.1	2.1	U	µg/L
10/23/2014	TB	Toluene	1.6	1.6	U	µg/L
10/23/2014	TB	trans-1,2-Dichloroethene	1.9	1.9	U	µg/L
10/23/2014	TB	Trichloroethene	1.9	1.9	U	µg/L
10/23/2014	TB	Vinyl chloride	2.3	2.3	U	µg/L
10/23/2014	TB	Xylenes, Total	3	3	U	µg/L
10/22/2014	DUP (SW01)	Fluoride, Dissolved	0.5	0.5	U	mg/L
10/22/2014	DUP (SW01)	Ammonia	0.1	0.1	U	mg/L
10/22/2014	DUP (SW01)	Arsenic, Dissolved	10	10	U	µg/L
10/22/2014	DUP (SW01)	Barium, Dissolved	200	200	U	µg/L
10/22/2014	DUP (SW01)	Boron, Dissolved	100	100	U	µg/L
10/22/2014	DUP (SW01)	Cadmium, Dissolved	5	5	U	µg/L
10/22/2014	DUP (SW01)	Calcium, Dissolved	46000	5000		µg/L
10/22/2014	DUP (SW01)	Chromium, Dissolved	10	10	U	µg/L
10/22/2014	DUP (SW01)	Copper, Dissolved	10	10	U	µg/L
10/22/2014	DUP (SW01)	Lead, Dissolved	3	3	U	µg/L
10/22/2014	DUP (SW01)	Magnesium, Dissolved	29000	5000		µg/L
10/22/2014	DUP (SW01)	Manganese, Dissolved	58.8	5		µg/L
10/22/2014	DUP (SW01)	Nickel, Dissolved	10	10	U	µg/L
10/22/2014	DUP (SW01)	Silver, Dissolved	10	10	U	µg/L
10/22/2014	DUP (SW01)	Zinc, Dissolved	20	20	U	µg/L
10/22/2014	DUP (SW01)	Mercury, Dissolved	0.2	0.2	U	µg/L
10/22/2014	DUP (SW01)	Dissolved Cyanide	0.01	0.01	U	mg/L
10/22/2014	DUP (SW01)	Chloride, Dissolved	177	1.7		mg/L
10/22/2014	DUP (SW01)	Sulfate	1.5	1.5	U	mg/L
10/22/2014	DUP (SW01)	Trichloroethene	2.1	2.1	U	µg/L
10/22/2014	DUP (SW01)	Carbon Disulfide	2.1	2.1	U	µg/L
10/22/2014	DUP (SW01)	Vinyl chloride	2.3	2.3	U	µg/L
10/22/2014	DUP (SW01)	Calcium and Magnesium Hardness, Dissolved	234	5	U	mg/L
10/22/2014	DUP (SW01)	Total Dissolved Solids Field Filtered	526	5	H	mg/L
10/22/2014	DUP (SW01)	Total Dissolved Solids Field Filtered	520	5	B*	mg/L

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Abbreviations:

UG/L = micrograms per liter
MG/L = milligrams per liter
MG/L AS N = milligrams per liter as nitrogen
MG/L AS P = milligrams per liter as phosphorus
UM = Unit of measure

Laboratory Notes:

B = Compound found in the blank
U = Parameter was not detected
b = Result detected in the Unseeded Control blank
^ = Instrument related QC exceeds the control limits
H = Sample was preped or analyzed beyond the specified holding time
* = LCS or LCSD exceeds the control limits; ISTD response or retention time outside acceptable limits

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Appendix F
Elevation Only Measurements
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Sample Date	Sample Point	Parameter	Result	UM
4/17/2014	G102	Ground Water Elevation	762.83	FT/MSL
4/17/2014	G014S	Ground Water Elevation	765.72	FT/MSL
4/17/2014	PZ01	Ground Water Elevation	728.97	FT/MSL
4/17/2014	PZ01U	Ground Water Elevation	762.61	FT/MSL
4/17/2014	PZ02U	Ground Water Elevation	764.11	FT/MSL
4/17/2014	PZ03U	Ground Water Elevation	763.37	FT/MSL
4/17/2014	PZ04U	Ground Water Elevation	763.53	FT/MSL
4/17/2014	PZ05U	Ground Water Elevation	763.96	FT/MSL
4/17/2014	PZ06U	Ground Water Elevation	763.42	FT/MSL
4/17/2014	R001D	Ground Water Elevation	728.58	FT/MSL
4/17/2014	US01D	Ground Water Elevation	727.88	FT/MSL
4/17/2014	US01S	Ground Water Elevation	764.66	FT/MSL
4/17/2014	US02D	Ground Water Elevation	728.35	FT/MSL
4/17/2014	US03D	Ground Water Elevation	728.55	FT/MSL
4/17/2014	US03I	Ground Water Elevation	732.14	FT/MSL
4/17/2014	US03S	Ground Water Elevation	762.16	FT/MSL
4/17/2014	US04D	Ground Water Elevation	728.38	FT/MSL
4/17/2014	US04S	Ground Water Elevation	762.52	FT/MSL
4/17/2014	US05D	Ground Water Elevation	728.43	FT/MSL
4/17/2014	US06D	Ground Water Elevation	728.22	FT/MSL
4/17/2014	US06I	Ground Water Elevation	746.23	FT/MSL
4/17/2014	US06S	Ground Water Elevation	763.04	FT/MSL
4/17/2014	W02D	Ground Water Elevation	728.63	FT/MSL
4/17/2014	W03D	Ground Water Elevation	728.33	FT/MSL
4/17/2014	W03SA	Ground Water Elevation	762.04	FT/MSL
4/17/2014	W03SB	Ground Water Elevation	762.9	FT/MSL
4/17/2014	W04S	Ground Water Elevation	761.94	FT/MSL
4/17/2014	W05S	Ground Water Elevation	762.96	FT/MSL
4/17/2014	W06S	Ground Water Elevation	763.2	FT/MSL
4/17/2014	W08D	Ground Water Elevation	728.14	FT/MSL
10/21/2014	G102	Ground Water Elevation	762.78	FT/MSL
10/21/2014	G014S	Ground Water Elevation	706.3	FT/MSL
10/21/2014	PZ01	Ground Water Elevation	729.07	FT/MSL
10/21/2014	PZ01U	Ground Water Elevation	762.74	FT/MSL
10/21/2014	PZ02U	Ground Water Elevation	764.73	FT/MSL
10/21/2014	PZ03U	Ground Water Elevation	763.1	FT/MSL
10/21/2014	PZ04U	Ground Water Elevation	763.11	FT/MSL
10/21/2014	PZ05U	Ground Water Elevation	763.11	FT/MSL
10/21/2014	PZ06U	Ground Water Elevation	762.94	FT/MSL
10/21/2014	R001D	Ground Water Elevation	729.61	FT/MSL
10/21/2014	US01D	Ground Water Elevation	728.65	FT/MSL
10/21/2014	US01S	Ground Water Elevation	763.96	FT/MSL
10/21/2014	US02D	Ground Water Elevation	728.91	FT/MSL
10/21/2014	US03D	Ground Water Elevation	728.77	FT/MSL
10/21/2014	US03I	Ground Water Elevation	732.9	FT/MSL
10/21/2014	US03S	Ground Water Elevation	762.09	FT/MSL
10/21/2014	US04D	Ground Water Elevation	728.7	FT/MSL
10/21/2014	US04S	Ground Water Elevation	762.77	FT/MSL

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Sample Date	Sample Point	Parameter	Result	UM
10/21/2014	US05D	Ground Water Elevation	729	FT/MSL
10/21/2014	US06D	Ground Water Elevation	728.92	FT/MSL
10/21/2014	US06I	Ground Water Elevation	746.14	FT/MSL
10/21/2014	US06S	Ground Water Elevation	762.82	FT/MSL
10/21/2014	W02D	Ground Water Elevation	729.22	FT/MSL
10/21/2014	W03D	Ground Water Elevation	729.18	FT/MSL
10/21/2014	W03SA	Ground Water Elevation	762.75	FT/MSL
10/21/2014	W03SB	Ground Water Elevation	762.9	FT/MSL
10/21/2014	W04S	Ground Water Elevation	761.89	FT/MSL
10/21/2014	W05S	Ground Water Elevation	762.79	FT/MSL
10/21/2014	W06S	Ground Water Elevation	762.92	FT/MSL
10/22/2014	W08D	Ground Water Elevation	728.74	FT/MSL

Abbreviations:
FT/MSL = feet above mean sea level UM = Units of Measure

Notes:
1. A complete round of groundwater elevations were obtained by EMT on April 17, 2014 and October 21, 2 elevations were collected on the same day and were completed before groundwater sampling activities w

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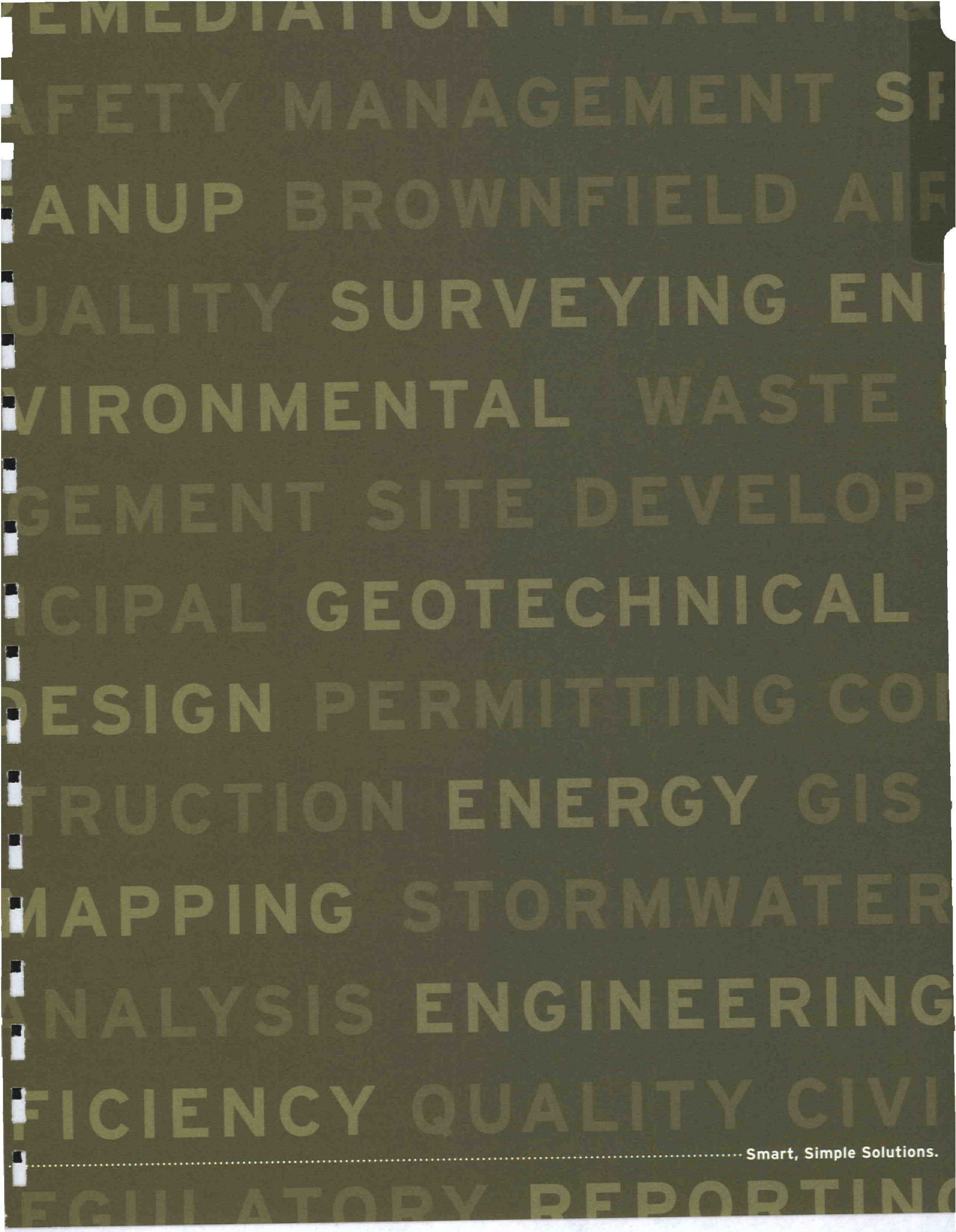
EMEDIATION
AFETY MANAGEMENT
ANUP BROWNFIELD
UALITY SURVEYING
VIRONMENTAL WASTE
GEMENT SITE DEVELOP
CIPAL GEOTECHNICAL
ESIGN PERMITTING
TRUCTION ENERGY GIS
MAPPING STORMWATER
NALYSIS ENGINEERING
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Smart, Simple Solutions.

Appendix G
Surface Water Results
2014 Annual Report
HOD Landfill - Antioch, Illinois / SCS Engineers Project No. 25212005.00

Sample Date	Sample Point	Parameter	Result	Reporting Limit	Flags	UM
4/17/2014	SW-01	Fluoride	0.5	0.5	U	MG/L
4/17/2014	SW-01	Ammonia as N	0.1	0.1	U	MG/L
4/17/2014	SW-01	Total Recoverable Phenolics	0.005	0.005	U	MG/L
4/17/2014	SW-01	Arsenic	10	10	U	UG/L
4/17/2014	SW-01	Barium	200	200	U	UG/L
4/17/2014	SW-01	Boron	100	100	U	UG/L
4/17/2014	SW-01	Cadmium	5	5	U	UG/L
4/17/2014	SW-01	Calcium	49900	5000		UG/L
4/17/2014	SW-01	Chromium	10	10	U	UG/L
4/17/2014	SW-01	Copper	10	10	U	UG/L
4/17/2014	SW-01	Iron, Dissolved	140	100		UG/L
4/17/2014	SW-01	Lead	3	3	U	UG/L
4/17/2014	SW-01	Magnesium	26700	5000		UG/L
4/17/2014	SW-01	Manganese	26	5		UG/L
4/17/2014	SW-01	Nickel	10	10	U	UG/L
4/17/2014	SW-01	Silver	10	10	U	UG/L
4/17/2014	SW-01	Zinc	20	20	U	UG/L
4/17/2014	SW-01	Selenium	5	5	U	UG/L
4/17/2014	SW-01	Chromium, hexavalent	0.01	0.01	U	MG/L
4/17/2014	SW-01	Mercury	0.2	0.2	U	UG/L
4/17/2014	SW-01	Cyanide, Total	0.01	0.01	U	MG/L
4/17/2014	SW-01	Chloride	181	1.7		MG/L
4/17/2014	SW-01	Sulfate	1.5	1.5	U	MG/L
4/17/2014	SW-01	Carbon disulfide	2.1	2.1	U	UG/L
4/17/2014	SW-01	Trichloroethene	1.9	1.9	U	UG/L
4/17/2014	SW-01	Vinyl chloride	2.3	2.3	U	UG/L
4/17/2014	SW-01	Calcium and Magnesium Hardness	235000	500		UG/L
4/17/2014	SW-01	Total Dissolved Solids	547	5		MG/L
4/17/2014	SW-01	Cr (III)	10	10	U	UG/L
4/17/2014	SW-01	Unionized Ammonia	0.1	0.1	U	MG/L AS N
4/17/2014	SW-02	Fluoride	0.5	0.5	U	MG/L
4/17/2014	SW-02	Ammonia as N	0.1	0.1	U	MG/L
4/17/2014	SW-02	Total Recoverable Phenolics	0.005	0.005	U	MG/L
4/17/2014	SW-02	Arsenic	10	10	U	UG/L
4/17/2014	SW-02	Barium	200	200	U	UG/L
4/17/2014	SW-02	Boron	100	100	U	UG/L
4/17/2014	SW-02	Cadmium	5	5	U	UG/L
4/17/2014	SW-02	Calcium	50200	5000		UG/L
4/17/2014	SW-02	Chromium	10	10	U	UG/L
4/17/2014	SW-02	Copper	10	10	U	UG/L
4/17/2014	SW-02	Iron, Dissolved	100	100	U	UG/L
4/17/2014	SW-02	Lead	3	3	U	UG/L
4/17/2014	SW-02	Magnesium	27600	5000		UG/L

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2014 Annual Report
HOD Landfill - Antioch, Illinois / SCS Engineers Project No. 25212005.00

Sample Date	Sample Point	Parameter	Result	Reporting Limit	Flags	UM
4/17/2014	SW-02	Manganese	77.9	5		UG/L
4/17/2014	SW-02	Nickel	10	10	U	UG/L
4/17/2014	SW-02	Silver	10	10	U	UG/L
4/17/2014	SW-02	Zinc	20	20	U	UG/L
4/17/2014	SW-02	Selenium	5	5	U	UG/L
4/17/2014	SW-02	Chromium, hexavalent	0.01	0.01	U	MG/L
4/17/2014	SW-02	Mercury	0.2	0.2	U	UG/L
4/17/2014	SW-02	Cyanide, Total	0.01	0.01	U	MG/L
4/17/2014	SW-02	Chloride	160	1.7		MG/L
4/17/2014	SW-02	Sulfate	1.5	1.5	U	MG/L
4/17/2014	SW-02	Carbon disulfide	2.1	2.1	U	UG/L
4/17/2014	SW-02	Trichloroethene	1.9	1.9	U	UG/L
4/17/2014	SW-02	Vinyl chloride	2.3	2.3	U	UG/L
4/17/2014	SW-02	Calcium and Magnesium Hardness	239000	500		UG/L
4/17/2014	SW-02	Total Dissolved Solids	511	5		MG/L
4/17/2014	SW-02	Cr (III)	10	10	U	UG/L
4/17/2014	SW-02	Unionized Ammonia	0.1	0.1	U	MG/L AS N
10/22/2014	SW-01	Fluoride	0.5	0.5	U	MG/L
10/22/2014	SW-01	Ammonia as N	0.1	0.1	U	MG/L
10/22/2014	SW-01	Total Recoverable Phenolics	0.005	0.005	U	MG/L
10/22/2014	SW-01	Arsenic	10	10	U	UG/L
10/22/2014	SW-01	Barium	200	200	U	UG/L
10/22/2014	SW-01	Boron	100	100	U	UG/L
10/22/2014	SW-01	Cadmium	5	5	U	UG/L
10/22/2014	SW-01	Calcium	49900	5000		UG/L
10/22/2014	SW-01	Chromium	10	10	U	UG/L
10/22/2014	SW-01	Copper	10	10	U	UG/L
10/22/2014	SW-01	Iron, Dissolved	100	100	U	UG/L
10/22/2014	SW-01	Lead	3	3	U	UG/L
10/22/2014	SW-01	Magnesium	29100	5000		UG/L
10/22/2014	SW-01	Manganese	63.3	5		UG/L
10/22/2014	SW-01	Nickel	10	10	U	UG/L
10/22/2014	SW-01	Silver	10	10	U	UG/L
10/22/2014	SW-01	Zinc	20	20	U	UG/L
10/22/2014	SW-01	Selenium	5	5	U	UG/L
10/22/2014	SW-01	Chromium, hexavalent	0.01	0.01	U	MG/L
10/22/2014	SW-01	Mercury	0.2	0.2	U	UG/L
10/22/2014	SW-01	Cyanide, Total	0.01	0.01	U	MG/L
10/22/2014	SW-01	Chloride	182	1.7		MG/L
10/22/2014	SW-01	Sulfate	1.5	1.5	U	MG/L
10/22/2014	SW-01	Carbon disulfide	2.1	2.1	U	UG/L
10/22/2014	SW-01	Trichloroethene	1.9	1.9	U	UG/L
10/22/2014	SW-01	Vinyl chloride	2.3	2.3	U	UG/L
10/22/2014	SW-01	Calcium and Magnesium Hardness	245000	500		UG/L

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HOD Landfill - Antioch, Illinois / SCS Engineers Project No. 25212005.00

Sample Date	Sample Point	Parameter	Result	Reporting Limit	Flags	UM
10/22/2014	SW-01	Total Dissolved Solids	530	5	H	MG/L
10/22/2014	SW-01	Total Dissolved Solids	537	5	*B	MG/L
10/22/2014	SW-01	Cr (III)	10	10	U	UG/L
10/22/2014	SW-01	Unionized Ammonia	0.1	0.1	U	MG/L AS N
10/22/2014	SW-02	Fluoride	0.5	0.5	U	MG/L
10/22/2014	SW-02	Ammonia as N	0.1	0.1	U	MG/L
10/22/2014	SW-02	Total Recoverable Phenolics	0.005	0.005	U	MG/L
10/22/2014	SW-02	Arsenic	10	10	U	UG/L
10/22/2014	SW-02	Barium	200	200	U	UG/L
10/22/2014	SW-02	Boron	100	100		UG/L
10/22/2014	SW-02	Cadmium	5	5	U	UG/L
10/22/2014	SW-02	Calcium	41500	5000		UG/L
10/22/2014	SW-02	Chromium	10	10	U	UG/L
10/22/2014	SW-02	Copper	10	10	U	UG/L
10/22/2014	SW-02	Iron, Dissolved	100	100	U	UG/L
10/22/2014	SW-02	Lead	3	3	U	UG/L
10/22/2014	SW-02	Magnesium	24900	5000		UG/L
10/22/2014	SW-02	Manganese	26.5	5		UG/L
10/22/2014	SW-02	Nickel	10	10	U	UG/L
10/22/2014	SW-02	Silver	10	10	U	UG/L
10/22/2014	SW-02	Zinc	20	20	U	UG/L
10/22/2014	SW-02	Selenium	5	5	U	UG/L
10/22/2014	SW-02	Chromium, hexavalent	0.01	0.01	U	MG/L
10/22/2014	SW-02	Mercury	0.2	0.2	U	UG/L
10/22/2014	SW-02	Cyanide, Total	0.01	0.01	U	MG/L
10/22/2014	SW-02	Chloride	177	1.7		MG/L
10/22/2014	SW-02	Sulfate	1.5	1.5	U	MG/L
10/22/2014	SW-02	Carbon disulfide	2.1	2.1	U	UG/L
10/22/2014	SW-02	Trichloroethene	1.9	1.9	U	UG/L
10/22/2014	SW-02	Vinyl chloride	2.3	2.3	U	UG/L
10/22/2014	SW-02	Calcium and Magnesium Hardness	206000	500		UG/L
10/22/2014	SW-02	Total Dissolved Solids	497	5	H	MG/L
10/22/2014	SW-02	Total Dissolved Solids	954	5	*B	MG/L
10/22/2014	SW-02	Cr (III)	10	10	U	UG/L
10/22/2014	SW-02	Unionized Ammonia	0.1	0.1	U	MG/L AS N

Abbreviations:

UG/L = micrograms per liter

MG/L = milligrams per liter

MG/L AS N = milligrams per liter as nitrogen

UM = Unit of measure

Laboratory Notes:

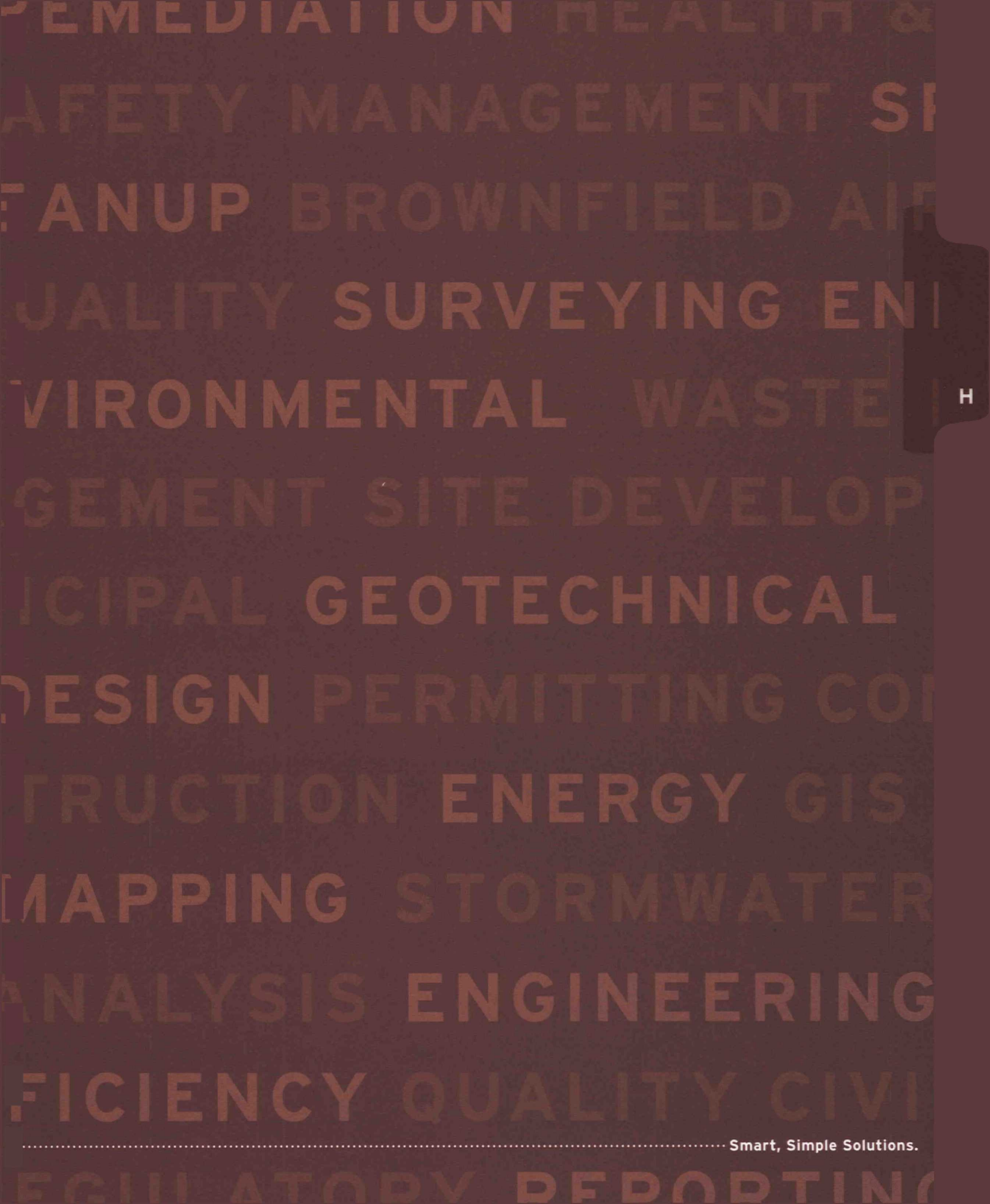
B = Compound was found in the blank and sample

U = Parameter was not detected

* = LCS or LCSD exceeds the control limits

H = Sample was prepped or analyzed beyond the specified holding time

Z:\Projects\25212005.00\Reports\2014\2014 Annual Report\Appendicies\Appendix G - Surface Water Monitoring Data\[Appendix G_SW01_SW02_2014.xlsx]Appendix H_SW01_SW02_2013


REMEDIATION
SAFETY MANAGEMENT
CLEANUP
BROWNFIELD
QUALITY
SURVEYING
VIRONMENTAL
WASTE
GEMENT
SITE DEVELOP
GEOTECHNICAL
DESIGN
PERMITTING
ENERGY
MAPPING
STORMWATER
ANALYSIS
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APPENDIX H

Laboratory Narratives – October 2014

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 480-69976-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-69976-1

Comments
No additional comments.

Receipt
The samples were received on 10/23/2014 9:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice.

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD exceeds the control limits
*	ISTD response or retention time outside acceptable limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery exceeds the control limits
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC exceeds the control limits.

General Chemistry

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F1	MS and/or MSD Recovery exceeds the control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 480-58291-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-58291-1

Comments
No additional comments.

Receipt
The samples were received on 4/18/2014 9:00 AM and 4/19/2014 9:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 6 coolers at receipt time were 2.9° C, 3.2° C, 3.6° C, 3.9° C, 4.1° C and 4.5° C.

GC/MS VOA
Method(s) OLM04.2/Vol: The following volatiles sample(s) was diluted due to foaming at the time of purging during the original sample analysis: DUP 02 (480-58355-1), W-06S (480-58355-5). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

GC/MS Semi VOA
Method(s) 8270D LL: Internal standard responses were outside of acceptance limits for the following samples: DUP 02 (480-58355-1), US-06S (480-58355-4). The samples show evidence of matrix interference.

Method(s) 8270D LL: The laboratory control sample (LCS) for preparation batch 480-178177 recovered outside control limits for several analytes. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

No other analytical or quality issues were noted.

HPLC
Method(s) 300.0: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 177769 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) 531.1: The following sample(s) was diluted due to the nature of the sample matrix: DUP 02 (480-58355-1), G-102 (480-58355-2), PZ-03U (480-58291-1), PZ-04U (480-58291-2), US-04S (480-58355-3), US-06S (480-58355-4), W-06S (480-58355-5). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

GC Semi VOA
Method(s) 8081B: The matrix spike / matrix spike duplicate (MS/MSD) precision for batch 177614 was outside control limits.

Method(s) 8081B: All primary data is reported from the RTX-CLPI column.

Method(s) 8082A: All primary data is reported from the ZB-5 column.

Method(s) 8151A: All primary data is reported from the RTX-CLPII column.

Method(s) 8151A: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 177608 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

No other analytical or quality issues were noted.

Metals
Method(s) 6010C: The Low Level Continuing Calibration Verification (CCVL 480-177657/33) contained dissolved iron outside the control limits. All reported samples (LCS 480-177379/2-B) associated with this CCVL were either below the laboratory's standard reporting limit

Job ID: 480-58291-1 (Continued)

Laboratory: TestAmerica Buffalo (Continued)

for this analyte or contained this analyte at a concentration greater than 10X the value found in the CCVL; therefore, re-analysis of samples was not performed.

Method(s) 6020A: The continuing calibration verification (CCV 480-179276 /63 and /76) recovered above the upper control limit for beryllium. The samples associated with this CCV were non-detects for the affected analyte; therefore, the data have been reported. The following samples are impacted: DUP 02 (480-58355-1), PZ-04U (480-58291-2), US-04S (480-58355-3), US-06S (480-58355-4), W-06S (480-58355-5).

No other analytical or quality issues were noted.

General Chemistry

Method(s) SM 2540C: Due to the matrix, the initial volume(s) used for the following sample(s) deviated from the standard procedure: DUP 02 (480-58355-1), W-06S (480-58355-5). The reporting limits (RLs) have been adjusted proportionately.

Method(s) 353.2: The results reported for the following sample(s) do not concur with results previously reported for this site: DUP 02 (480-58355-1). Reanalysis was performed, and the result(s) confirmed.

Method(s) 420.4: The results reported for the following sample(s) do not concur with results previously reported for this site: W-06S (480-58355-5). Reanalysis was performed, and the result(s) confirmed.

Method(s) 9251: The results reported for the following sample(s) do not concur with results previously reported for this site: DUP 02 (480-58355-1), W-06S (480-58355-5). Reanalysis was performed, and the result(s) confirmed.

No other analytical or quality issues were noted.

Organic Prep

Method(s) 548.1: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with batch 177914.

No other analytical or quality issues were noted.

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery exceeds the control limits
*	LCS or LCSD exceeds the control limits
*	ISTD response or retention time outside acceptable limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC VOA

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery exceeds the control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC Semi VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

HPLC/IC

Qualifier	Qualifier Description
*	LCS or LCSD exceeds the control limits

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC exceeds the control limits.

General Chemistry

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F1	MS and/or MSD Recovery exceeds the control limits
F2	MS/MSD RPD exceeds control limits
*	LCS or LCSD exceeds the control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 480-58267-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-58267-1

Comments
No additional comments.

Receipt
The samples were received on 4/18/2014 9:00 AM and 4/19/2014 9:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 13 coolers at receipt time were 2.5° C, 2.6° C, 2.7° C, 2.9° C, 3.1° C, 3.2° C, 3.4° C, 3.5° C, 3.7° C, 3.8° C, 3.9° C, 4.0° C and 4.2° C.

GC/MS VOA
Method(s) OLM04.2/Vol: The following volatiles sample(s) was diluted due to foaming at the time of purging during the original sample analysis: US-03D (480-58365-3). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

GC/MS Semi VOA
Method(s) 548.1: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 177623 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) 8270D LL: The matrix spike (MS) recoveries for preparation batch 480-176947 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) 8270D LL: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 480-178177 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) 8270D LL: Internal standard responses were outside of acceptance limits for the following sample: ATMOSPHERIC BLANK (480-58365-1). The sample shows evidence of matrix interference.

Method(s) 8270D LL: The laboratory control sample (LCS) for preparation batch 480-178177 recovered outside control limits for the following analytes: Atrazine. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

Method(s) 8270D LL: Per the SOP due to the low level analysis the tailing for the DFTPP is allowed to outside allowed tolerences.

No other analytical or quality issues were noted.

HPLC
Method(s) 300.0: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 178293 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) 531.1: The laboratory control sample dup (LCSD) associated with batch 327401 was outside acceptance criteria for aldicarb. The batch matrix spike/matrix spike duplicate (MS/MSD) was within LCS acceptance limits and may be used to evaluate matrix performance. These analytes were biased high in the LCSD and were not detected in the associated samples; therefore, the data have been reported and qualified.

Method(s) 531.1: The following sample(s) was diluted due to the nature of the sample matrix: R-01D (480-58267-4), US-01D (480-58267-1), US-02D (480-58267-2), US-05D (480-58267-5), W-03D (480-58267-3). Elevated reporting limits (RLs) are provided.

Method(s) 531.1: The following sample(s) was diluted due to the nature of the sample matrix: DUP (480-58365-2), US-03D (480-58365-3),

Job ID: 480-58267-1 (Continued)

Laboratory: TestAmerica Buffalo (Continued)

US-04D (480-58365-4), US-06D (480-58365-5), W-08D (480-58365-6). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

GC VOA

Method(s) RSK-175: The following samples were diluted to bring the concentration of target analytes within the calibration range: W-08D (480-58365-6). Elevated reporting limits (RLs) are provided.

Method(s) RSK-175: The matrix spike(MS) recoveries were outside control limits for analytical batch 177346. Sample inconsistency is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

No other analytical or quality issues were noted.

GC Semi VOA

Method(s) 8081B: All primary data is reported from the RTX-CLPI column.

Method(s) 8082A: All primary data is reported from the ZB-5 column.

Method(s) 8151A: Surrogate recovery for the following sample was outside control limits: US-03D (480-58365-3). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method(s) 8151A: All primary data is reported from the RTX-CLPII column.

No other analytical or quality issues were noted.

Metals

Method(s) 6010C: The recovery of Post Spike, (480-58365-3 PDS), in batch 480-177392 exhibited results outside the quality control limits for dissolved silver, arsenic, boron, barium, cadmium, cobalt, chromium, copper, iron, manganese, nickel, lead, and zinc. However, the Serial Dilution of this sample was compliant. Therefore, no corrective action was necessary.

Method(s) 6010C: The low level continuing calibration verification (CCVL 480-177654/36) for analytical batch 480-177654 contained total iron above the reporting limit (RL). All reported samples associated with this CCVL were either ND for this analyte or contained this analyte at a concentration greater than 10X the value found in the CCVL; therefore, re-analysis of sample W-08D (480-58365-6) was not performed.

Method(s) 6020A: The continuing calibration verification (CCV 480-179276 /63 and /76) recovered above the upper control limit for beryllium. The samples associated with this CCV were non-detects for the affected analyte; therefore, the data have been reported. The following samples are impacted: DUP (480-58365-2), US-03D (480-58365-3), US-04D (480-58365-4), US-06D (480-58365-5), W-08D (480-58365-6).

No other analytical or quality issues were noted.

General Chemistry

Method(s) 353.2: The results reported for the following sample(s) do not concur with results previously reported for this site: DUP (480-58365-2). Reanalysis was performed, and the result(s) confirmed.

Method(s) SM 5210B: The USB dilution water D.O. depletion was greater than 0.2 mg/L but less than the reporting limit of 2.0 mg/L. The associated sample results in batch 176876 are reported. (USB 480-176876/1)

Method(s) SM 5210B: The USB dilution water D.O. depletion was greater than 0.2 mg/L but less than the reporting limit of 2.0 mg/L. The associated sample results in batch 177030 are reported. (USB 480-177030/1)

Method(s) SM 5210B: The laboratory control sample (LCS) for batch 177030 recovered outside control limits for the following analytes: Biochemical Oxyhen Demand. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported. DUP (480-58365-2), US-03D (480-58365-3), US-04D (480-58365-4), US-06D (480-58365-5), W-08D

Job ID: 480-58267-1 (Continued)

Laboratory: TestAmerica Buffalo (Continued)

(480-58365-6)

Method(s) SM 5210B: The residual D.O. in sample(s) (LCS 480-177030/2) was < 1.0 mg/L in all dilutions tested; they were over depleted. Results were reported, but they may be biased low.

Method(s) SM 4500 S2 F: The matrix spike / matrix spike duplicate (MS/MSD) precision for batch 177026 was outside control limits. Sample matrix interference and/or non-homogeneity are suspected. The associated laboratory control sample (LCS) was within acceptance limits. US-02D (480-58267-2 MSD)

No other analytical or quality issues were noted.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Qualifiers

GC VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F1	MS and/or MSD Recovery exceeds the control limits
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery exceeds the control limits
*	LCS or LCSD exceeds the control limits
B	Compound was found in the blank and sample.
H	Sample was prepped or analyzed beyond the specified holding time

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 480-69865-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-69865-1

Comments
No additional comments.

Receipt
The samples were received on 10/22/2014 9:00 AM, 10/23/2014 9:00 AM and 10/24/2014 9:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 10 coolers at receipt time were 2.5° C, 2.6° C, 2.6° C, 2.8° C, 3.0° C, 3.2° C, 3.6° C, 4.2° C, 4.3° C and 4.7° C.

GC/MS VOA
Method(s) OLM04.2/Vol: The following sample was diluted to bring the concentration of target analytes within the calibration range: US-03D (480-69942-4). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

HPLC/IC
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC VOA
Method(s) RSK-175: The following sample was diluted to bring the concentration of target analytes within the calibration range: W-08D (480-69865-1). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
Method(s) 6010C: The dissolved lead values obtained for sample W-08D (480-69865-1) were inconsistent with historical trends. Reanalysis was performed and the values were confirmed. Only the results from the original analysis were provided in this data package.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry
Method(s) SM 2540C: The laboratory control sample (LCS) for batch 210619 recovered outside control limits for the following analytes: total dissolved solids. The method blank was also over the reporting limit (RL). Contamination is believed to be the cause. The sample results have been qualified and reported.US-02D (480-69942-1)

Method(s) SM 2540C: The method blank for batch 210619 contained Total Dissolved Solids above the reporting limit (RL). US-02D (480-69942-1)

Method(s) SM 2540C: Reanalysis of the following sample(s) was performed outside of the analytical holding time due to the laboratory control sample (LCS) failing high in batch 210619. Both sets of data have been reported.: US-02D (480-69942-1).

Method(s) 350.1: The method blank for batch 211380 contained ammonia above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-analysis of samples was not performed. W-03D (480-69865-2)

Method(s) SM 5210B: The USB dilution water D.O. depletion was greater than 0.2 mg/L but less than the reporting limit of 2.0 mg/L. The associated sample results in batch 209440 are reported. (USB 480-209440/1)

Method(s) SM 5210B: The USB dilution water D.O. depletion was greater than 0.2 mg/L but less than the reporting limit of 2.0 mg/L. The associated sample results in batch 209728 are reported. (USB 480-209728/1)

Method(s) SM 5210B: The USB dilution water D.O. depletion was greater than 0.2 mg/L but less than the reporting limit of 2.0 mg/L. The associated sample results in batch 209891 are reported. (USB 480-209891/1)

Job ID: 480-69865-1 (Continued)

Laboratory: TestAmerica Buffalo (Continued)

Method(s) SM 5210B: The laboratory control sample (LCS) for batch 209891 recovered outside control limits for the following analytes: Biochemical Oxygen Demand. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.US-03D (480-69942-4), US-04D (480-69942-2)

Method(s) SM 5210B: The USB dilution water D.O. depletion was greater than 0.2 mg/L but less than the reporting limit of 2.0 mg/L. The associated sample results in batch 209929 are reported. (USB 480-209929/1)

Method(s) SM 5210B: The glucose-glutamic acid standard recovered outside the recovery limits specified in the method in batch 209929 . (LCS 480-209929/2)

Method(s) SM 5210B: The laboratory control sample (LCS) for batch 209929 recovered outside control limits for the following analytes: Biochemical Oxygen Demand. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.US-06D (480-69942-3)

Method(s) SM 5210B: The USB dilution water D.O. depletion was greater than 0.2 mg/L but less than the reporting limit of 2.0 mg/L. The associated sample results in batch 210007 are reported. (USB 480-210007/1)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Qualifiers

General Chemistry

Qualifier	Qualifier Description
*	LCS or LCSD exceeds the control limits
B	Compound was found in the blank and sample.
H	Sample was prepped or analyzed beyond the specified holding time

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 480-69866-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-69866-1

Comments
No additional comments.

Receipt
The samples were received on 10/22/2014 9:00 AM, 10/23/2014 9:00 AM and 10/24/2014 9:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 5 coolers at receipt time were 2.0° C, 2.6° C, 2.8° C, 4.0° C and 4.2° C.

GC/MS VOA
Method(s) OLM04.2/Vol: The following volatiles sample was diluted due to foaming at the time of purging during the original sample analysis: W-06S (480-70053-1). Elevated reporting limits (RLs) are provided.

Method(s) OLM04.2/Vol: The following sample was collected in properly preserved vials for analysis of volatile organic compounds (VOCs). However, the pH was outside the required criteria when verified by the laboratory, and corrective action was not possible: W-06S (480-70053-1).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

HPLC/IC
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Metals
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry
Method(s) SM 2540C: The laboratory control sample (LCS) for batch 210619 recovered outside control limits for the following analytes: total dissolved solids. The method blank was also over the reporting limit (RL). Contamination is believed to be the cause. The sample results have been qualified and reported.US-06S (480-69940-1)

Method(s) SM 2540C: Due to the matrix, the initial volume used for the following sample deviated from the standard procedure: W-06S (480-70053-1). The reporting limits (RLs) have been adjusted proportionately.

Method(s) SM 2540C: Reanalysis of the following sample(s) was performed outside of the analytical holding time due to the laboratory control sample (LCS) and method blank (MB) failing high in batch 210619. Both sets of data have been reported.: US-06S (480-69940-1).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD exceeds the control limits
X	Surrogate is outside control limits
*	ISTD response or retention time outside acceptable limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC exceeds the control limits.

General Chemistry

Qualifier	Qualifier Description
*	LCS or LCSD exceeds the control limits
b	Result Detected in the Unseeded Control blank (USB).
H	Sample was prepped or analyzed beyond the specified holding time

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 480-58350-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-58350-1

Comments
No additional comments.

Receipt
The samples were received on 4/19/2014 9:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.6° C.

GC/MS VOA
Method(s) OLM04.2/Vol: The following volatiles sample(s) was diluted due to foaming at the time of purging during the original sample analysis: LCT-01 (480-58350-1). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

GC/MS Semi VOA
Method(s) 8270D LL: The following sample was diluted due to the nature of the sample matrix: LCT-01 (480-58350-1). As such, surrogate recoveries are below the calibration range or are not reported, and elevated reporting limits (RLs) are provided.

Method(s) 8270D LL: Internal standard responses were outside of acceptance limits for the following sample: LCT-01 (480-58350-1). The sample shows evidence of matrix interference.

Method(s) 8270D LL: The laboratory control sample (LCS) for preparation batch 480-178177 recovered outside control limits for several analytes. This analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

No other analytical or quality issues were noted.

HPLC
Method(s) 300.0: The following sample(s) was diluted due to the abundance of non-target analytes: (480-58350-1 MS), LCT-01 (480-58350-1). Elevated reporting limits (RLs) are provided.

Method(s) 531.1: The following sample(s) was diluted due to the nature of the sample matrix: LCT-01 (480-58350-1). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

GC Semi VOA
Method(s) 8081B: The following sample was diluted due to the nature of the sample matrix : LCT-01 (480-58350-1). As such, surrogate recoveries are below the calibration range or are not reported, and elevated reporting limits (RLs) are provided.

Method(s) 8081B: All primary data is reported from the RTX-CLPI column.

Method(s) 8082A: All primary data is reported from the ZB-5 column.

Method(s) 8151A: All primary data is reported from the RTX-CLPII column.

No other analytical or quality issues were noted.

Metals
Method(s) 6010C: The Low Level Continuing Calibration Verification (CCVL 480-177656/24) contained total iron outside the control limits. All reported samples (LCS 480-177374/2-A), (MB 480-177374/1-A), LCT-01 (480-58350-1) associated with this CCVL were either below the laboratory's standard reporting limit for this analyte or contained this analyte at a concentration greater than 10X the value found in the CCVL; therefore, re-analysis of samples was not performed.

Job ID: 480-58350-1 (Continued)

Laboratory: TestAmerica Buffalo (Continued)

Method(s) 6010C: The Low Level Continuing Calibration Verification (CCVL 480-177657/33) contained dissolved iron outside the control limits. All reported samples (LCS 480-177379/2-B), LCT-01 (480-58350-1) associated with this CCVL were either below the laboratory's standard reporting limit for this analyte or contained this analyte at a concentration greater than 10X the value found in the CCVL; therefore, re-analysis of samples was not performed.

Method(s) 7470A: The values obtained for sample LCT-01 (480-58350-1) were inconsistent with historical trends. Reanalysis was performed and the values were confirmed. Only the results from the original analysis were provided in this data package.

No other analytical or quality issues were noted.

General Chemistry

Method(s) SM 2540C: Due to the matrix, the initial volume(s) used for the following sample(s) deviated from the standard procedure: LCT-01 (480-58350-1). The reporting limits (RLs) have been adjusted proportionately.

Method(s) SM 2540D: Due to the matrix, the initial volume(s) used for the following sample(s) deviated from the standard procedure: LCT-01 (480-58350-1). The reporting limits (RLs) have been adjusted proportionately.

Method(s) 353.2: The results reported for the following sample(s) do not concur with results previously reported for this site: LCT-01 (480-58350-1). Reanalysis was performed, and the result(s) confirmed.

Method(s) SM 5210B: The USB dilution water D.O. depletion was greater than 0.2 mg/L but less than the reporting limit of 2.0 mg/L. The associated sample results in batch 177030 are reported. (USB 480-177030/1)

Method(s) SM 5210B: The USB dilution water D.O. depletion was greater than 0.2 mg/L but less than the reporting limit of 2.0 mg/L. The associated sample results in batch 180173 are reported. (USB 480-180173/1)

Method(s) SM 5210B: Reanalysis of the following sample(s) was performed outside of the analytical holding time due to laboratory control sample failure in the original batch.: LCT-01 (480-58350-1).

Method(s) SM 5210B: The residual D.O. in sample(s) (LCS 480-177030/2) was < 1.0 mg/L in all dilutions tested; they were over depleted. Results were reported, but they may be biased low.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep

Method(s) 3510C: The following sample formed emulsions during the extraction procedure: LCT-01 (480-58350-1). The emulsions were broken up using centrifugation.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Qualifiers

General Chemistry

Qualifier	Qualifier Description
b	Result Detected in the Unseeded Control blank (USB).

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 480-69870-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-69870-1

Comments
No additional comments.

Receipt
The sample was received on 10/22/2014 9:00 AM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.4° C.

GC/MS VOA
Method(s) OLM04.2/Vol: The following volatiles samples were diluted due to foaming at the time of purging during the original sample analysis: (480-69870-1 MS), (480-69870-1 MSD), LCT-01 (480-69870-1). Elevated reporting limits (RLs) are provided.

Method(s) OLM04.2/Vol: The following samples were collected in properly preserved vials for analysis of volatile organic compounds (VOCs). However, the pH was outside the required criteria when verified by the laboratory, and corrective action was not possible: (480-69870-1 MS), (480-69870-1 MSD), LCT-01 (480-69870-1).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry
Method(s) SM 5210B: The USB dilution water D.O. depletion was greater than 0.2 mg/L but less than the reporting limit of 2.0 mg/L. The associated sample results in batch 209531 are reported. (USB 480-209531/1)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Table of Contents

Qualifiers

General Chemistry

Qualifier	Qualifier Description
*	LCS or LCSD exceeds the control limits
b	Result Detected in the Unseeded Control blank (USB).
B	Compound was found in the blank and sample.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Qualifiers

General Chemistry

Qualifier	Qualifier Description
*	LCS or LCSD exceeds the control limits
b	Result Detected in the Unseeded Control blank (USB).
H	Sample was prepped or analyzed beyond the specified holding time

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 480-58356-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-58356-1

Comments
No additional comments.

Receipt
The sample was received on 4/19/2014 9:00 AM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.8° C.

Metals
Method(s) 6020A: Sample LST01 (480-58356-1) for ICP/MS metals analyzed by EPA Method 6020 required a dilution due to high concentrations of dissolved solids known to cause failure of routine method quality control (QC), such as internal standards outside of control limits. Samples that contain high levels of dissolved solids can cause significant signal suppression or enhancement. The analytical method recommends applying a dilution to correct for physical interferences of samples that contain greater than 2000 mg/L of total solids, as determined by performing a screening procedure.

No other analytical or quality issues were noted.

General Chemistry
Method(s) SM 2540D: Due to the matrix, the initial volume(s) used for the following sample(s) deviated from the standard procedure: LST01 (480-58356-1). The reporting limits (RLs) have been adjusted proportionately.

Method(s) SM 5210B: The USB dilution water D.O. depletion was greater than 0.2 mg/L but less than the reporting limit of 2.0 mg/L. The associated sample results in batch 177030 are reported. (USB 480-177030/1)

Method(s) SM 5210B: The USB dilution water D.O. depletion was greater than 0.2 mg/L but less than the reporting limit of 2.0 mg/L. The associated sample results in batch 180173 are reported. (USB 480-180173/1)

Method(s) SM 5210B: Reanalysis of the following sample(s) was performed outside of the analytical holding time due to laboratory control sample failure in the original batch.: LST01 (480-58356-1).

Method(s) SM 5210B: The residual D.O. in sample(s) (LCS 480-177030/2) was < 1.0 mg/L in all dilutions tested; they were over depleted. Results were reported, but they may be biased low.

No other analytical or quality issues were noted.

Qualifiers

General Chemistry

Qualifier	Qualifier Description
b	Result Detected in the Unseeded Control blank (USB).

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 480-69869-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-69869-1

Comments
No additional comments.

Receipt
The sample was received on 10/22/2014 9:00 AM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.4° C.

Metals
Method(s) 6020A: Sample LST01 (480-69869-1) for ICP/MS metals analyzed by EPA Method 6020A required a dilution due to high concentrations of dissolved solids known to cause failure of routine method quality control (QC), such as internal standards outside of control limits. Samples that contain high levels of dissolved solids can cause significant signal suppression or enhancement. The analytical method recommends applying a dilution to correct for physical interferences of samples that contain greater than 2000 mg/L of total solids, as determined by performing a screening procedure.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry
Method(s) SM 5210B: The USB dilution water D.O. depletion was greater than 0.2 mg/L but less than the reporting limit of 2.0 mg/L. The associated sample results in batch 209531 are reported. (USB 480-209531/1)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Qualifiers

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
*	LCS or LCSD exceeds the control limits
B	Compound was found in the blank and sample.
H	Sample was prepped or analyzed beyond the specified holding time

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 480-69933-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-69933-1

Comments
No additional comments.

Receipt
The samples were received on 10/23/2014 9:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.6° C.

GC/MS VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

HPLC/IC
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Metals
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry
Method(s) SM 2540C: Reanalysis of the following sample(s) was performed outside of the analytical holding time due to LCS and MB failures, samples originally set within hold time: SW DUP (480-69933-3), SW-01 (480-69933-2), SW-02 (480-69933-1).

Method(s) SM 2540C: The laboratory control sample (LCS) for batch 210619 recovered outside control limits for the following analytes: total dissolved solids. The method blank was also over the reporting limit (RL). Contamination is believed to be the cause. The sample results have been qualified and reported.SW DUP (480-69933-3), SW-01 (480-69933-2), SW-02 (480-69933-1)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Qualifiers

General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery exceeds the control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 480-58258-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-58258-1

Comments
No additional comments.

Receipt
The samples were received on 4/18/2014 9:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice.

GC/MS VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

HPLC
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Metals
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD exceeds the control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC exceeds the control limits.

General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery exceeds the control limits
*	LCS or LCSD exceeds the control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 480-58357-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-58357-1

Comments
No additional comments.

Receipt
The samples were received on 4/19/2014 9:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.8° C.

GC/MS VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC/MS Semi VOA
Method(s) 8270D LL: The laboratory control sample (LCS) for preparation batch 480-178177 recovered outside control limits for several analytes. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

No other analytical or quality issues were noted.

HPLC
Method(s) 531.1: The following sample(s) was diluted due to the nature of the sample matrix: VW-03 (480-58357-1). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

GC VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC Semi VOA
Method(s) 8081B: All primary data is reported from the RTX-CLPI column.

Method(s) 8082A: All primary data is reported from the ZB-5 column.

Method(s) 8151A: All primary data is reported from the RTX-CLPII column.

No other analytical or quality issues were noted.

Metals
Method(s) 6010C: The Low Level Continuing Calibration Verification (CCVL 480-177656/24) contained total iron outside the control limits. All reported samples (LCS 480-177374/2-A), (MB 480-177374/1-A) associated with this CCVL were either below the laboratory's standard reporting limit for this analyte or contained this analyte at a concentration greater than 10X the value found in the CCVL; therefore, re-analysis of samples was not performed.

No other analytical or quality issues were noted.

General Chemistry
Method(s) SM 5210B: The USB dilution water D.O. depletion was greater than 0.2 mg/L but less than the reporting limit of 2.0 mg/L. The associated sample results in batch 177030 are reported. (USB 480-177030/1)

Method(s) SM 5210B: The laboratory control sample (LCS) for batch 177030 recovered outside control limits for the following analytes: Biochemical Oxyhen Demand. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported. VW-03 (480-58357-1)

No other analytical or quality issues were noted.

Job ID: 480-58357-1 (Continued)

Laboratory: TestAmerica Buffalo (Continued)

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD exceeds the control limits
F1	MS and/or MSD Recovery exceeds the control limits

GC VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC exceeds the control limits.

General Chemistry

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 480-69943-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-69943-1

Comments
No additional comments.

Receipt
The samples were received on 10/23/2014 9:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.4° C.

GC/MS VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC/MS Semi VOA
Method(s) 548.1: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 210744 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) 8270D LL: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for preparation batch 210409 recovered outside control limits for the following analyte: Bis(2-ethylhexyl)phthalate. This analyte was biased high in the LCS/LCSD and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8270D LL: The laboratory control sample duplicate (LCSD) for preparation batch 210409 recovered slightly below control limits for the following analyte: Atrazine. This analyte met control criteria in the LCS and was; therefore, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

HPLC/IC
Method(s) 531.1: The following sample(s) was diluted due to the nature of the sample matrix: VW-03 (480-69943-1). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC Semi VOA
Method(s) 8081B: All primary data is reported from the RTX-CLPI column.

Method(s) 8082A: All primary data is reported from the ZB-5 column.

Method(s) 8082A: The percent difference in a multi-component continuing calibration verification is assessed on the basis of the total amount, individual peak calculations are only listed for completeness.

Method(s) 8151A: All primary data is reported from the RTX-CLPII column.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
Method(s) 6010C: The Low Level Continuing Calibration Verification (CCVL 480-210138/108) contained total boron above the reporting limit (RL). All reported samples VW-03 (480-69943-1) associated with this CCVL were either below the laboratory's standard reporting limit for this analyte or contained this analyte at a concentration greater than 10X the value found in the CCVL; therefore, re-analysis of samples was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Job ID: 480-69943-1 (Continued)

Laboratory: TestAmerica Buffalo (Continued)

General Chemistry

Method(s) SM 5210B: The USB dilution water D.O. depletion was greater than 0.2 mg/L but less than the reporting limit of 2.0 mg/L. The associated sample results in batch 209728 are reported. (USB 480-209728/1)

Method(s) 351.2: The method blank for batch 213436 contained total kjeldahl nitrogen above the method detection limit. This target analyte concentration was less than the standard reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.VW-03 (480-69943-1)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep

Method(s) 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with batch 210024.

Method(s) 8151A: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with batch 210170.

Method(s) 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with batch 210409.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.